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MARYLAND GEOLOGICAL SURVEY.

WM. BULLOCK CLARK, STATE GEOLOGIST.

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OF

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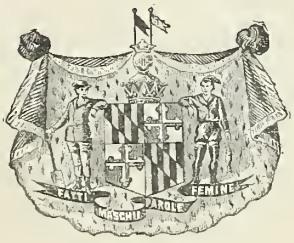

Including

Publications relating to the Physiography, Geology and Mineral Resources.

BY

EDWARD B. MATHEWS.

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PART IV

BIBLIOGRAPHY AND CARTOGRAPHY OF MARYLAND

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BIBLIOGRAPHY.

1612.

Smith, John. A Map of Virginia VVith a Description of the Covntrey, the Commodities, People, Government and Relegeon. VVritten by Captaine Smith, sometime Governour of the Covntrey. Oxford, printed by Joseph Barnes, 1612. 4to. 174 pp.

1620.

Anon. A Declaration of the State of the Colonies.

1624.

Smith, John. A Generall Historie of Virginia, New England, and the Summer Isles, etc. London, 1624. [Several editions.]

(Repub.) The True Travels, Adventures and Observations of Captaine Iohn Smith in Europe, Asia, Afrika, and America, etc. Richmond, 1819, 2 vols.—from London edition of 1629.

Pinkerton's Voyages and Travels, vol. 13, 4to, London, 1812, pp. 1-253—from London edition of 1624.

Eng. Scholars Library No. 16. (For bibliography of Smith's works and their republication, see pp. cxxx-cxxxii.)

This work contains many interesting notes on the physiography of Chesapeake Bay and its tributaries, and briefly describes the clays and gravels along their shores.

1634.

Anon. A Relation of the Successefull beginnings of the Lord Baltemore's Plantation in Mary-Land; Being an extract of certaine Let-

ters written from thence, by some of the Adventurers to their friends in England. Anno Domini 1634.

Shea's Early Southern Tracts, No. 1, 23 pp. 4to.

Mentions the shipment of a "good quantitie of iron-stone."

CALVERT, CECIL. Declaratio Coloniae Dominei Baronis de Baltimoro (. . .) in terra Mariae prope Virginiam: [etc.]

(Trans.) Force's Hist. Tracts, vol. iv, No. 12, 1846, pp. 3-7.

(Pub.) Woodstock Letters, 1872.

(Pub. and Trans.) Fund Publication, Md. Hist. Soc., No. 7, 1874, pp. 44-53.

Refers to the rivers, rich soils, plants, fish, and other animals.

WHITE, ANDREW. Relatio Itineris in Marylandiam.

(Trans.) Privately published by Nathan C. Brooks, 1847. Force's Hist. Tracts, vol. iv, No. 12, 1846, 47 pp.

(Pub.) Woodstock Letters, 1872. (Pub. and trans.) Md. Hist. Soc. Fund Pub., No. 7, Baltimore, 1874, 43 pp.

1635.

ANON. A Relation of Maryland; Together VVith A Map of the Countrey, The Conditions of Plantation, His Majesties Charter to the Lord Baltemore, translated into English. London, 1635.

(Repub.) Sabine's Reprints, 4to ser., No. 2, New York, 1865, pp. 1-65, with appendix pp. 67-73.

BLEAU, JOHANNEM and WILHELM. Tweede del van't Toouneel des aerdrucx, Ofte Nievwe atlas uytgegeven Door Wilhelm; en Iohannem Bleau. Amsterdam, 1635.

Two folio pages of description in Dutch. The authors noticed the northeast-southwest trend of mountains, the cutting through of the rivers, and also give a description of the prominent rivers flowing into the Chesapeake. The information is probably based on Smith's Explorations, since the accompanying map bears the crosses indicating the farthest points reached by Smith.

1656.

HAMMOND, JOHN. Leah and Rachel; or, the Two Fruitfull Sisters Virginia and Mary-Land: their Present Condition, Impartially stated and related. London, 1656.

(Repub.) in Force's Collection of Historical Tracts, vol. iii, No. 14, Washington, 1844, 30 pp.

1666.

ALSOP, GEORGE. A Character of the Province of Maryland.

(Repub.) Gowan's Bibliotheca Americana, New York, 1869, No. 5.

A curious and picturesque tract on Maryland by a "rollicking roysterer of the days of the Restoration," accompanied by a map of the Chesapeake.

1669.

Shrigley, Nathaniel. A True Relation of Virginia and Mary-Land; with the commodities therein, [etc.] London, 1669.

(Repub.) Force's Collection of Historical Tracts, vol. iii, No. 7, Washington, 1844, 51 pp.

Enumerates rivers and bays. "There is Fullers-Earth, Marle, Salt-peter, Iron, Stone, Lead, Tin and Silver Oar," p. 5.

1672.

Blome, Richard. A Description Of the Island of Jamaica; With other Isles and Territories in America, to which the English are Related. London, 1672. 12mo. 192 pp.

"Contains a brief history of all the British Isles and provinces in America, and their climate, production, population, trade, etc. and appears to embody the most authentic account extant at that date." Maryland, pp. 157-166.

1674.

Blome, R. Description de l'isle de la Jamaique et de toutes celles que possedent les Anglois dans l'Amerique. Recueil de divers Voyages faits en Afrique et en l'Amerique, [etc.] Paris, 1674.

1679.

Daniel, R. A new Map of the English Empire in America, viz: New England, New York, New Jersey, Maryland, Virginia, with an accurate description of those countries. London, (?) 1679.

1685.

B(lome), R. The English Empire in America: [etc.] By R. B. 12mo. London, 1685.

1687.

Anon. The Present State Of His Majesties Isles and Territories in America, viz. Maryland, With (New) maps of every Place. 8vo. London, 1687.

1688.

Blome, R. L'Amerique angloise ou Description des isles et terres du roi d'Angleterre dans l'Amerique. Amsterdam, 1688. 12mo. 332 pp.

Probably a translation of 'Anon. 1687,' which has not been seen.

1732.

Byrd, Wm. A Progress to the Mines.

(Pub.) in Westover Papers. Petersburg, Va., 1841, vol. ii, pp. 41-82.

This is an account of a trip to the mines near Fredericksburg. It includes references to Maryland ore and many observations on the working of iron at that time.

1733.

Anon. Articles of Agreement made and concluded upon between The Right Honourable The Lord Proprietary of Maryland, and The Honourable The Proprietarys of Pensilvania, &c. touching the Limits and Boundaries of the Two Provinces. With The Commission, Constituting Certain Persons to Execute the same. Philadelphia: Printed by B. Franklin, at the New Printing Office near the Market. M,-DCC,XXXIII. Folio, 19 pp. Map.

1735.

Anon. A Letter to a Gentleman, containing the Boundaries of the Province of Maryland, wherein is shewn, that no part of the 40th degree of latitude is, or can be, any part thereof. London, for the author [about 1735], 12mo, 15 pp.

Senex, I. A short account of the first settlement of the Provinces of Virginia, Maryland, New York and Pennsylvania by the English, to which is annexed a map of Maryland according to the bounds mentioned in the charter, and also of the adjacent country, anno 1632. London, 1735.

1755.

Evans, Lewis. Geographical, Historical, Political and Mechanical Essays. Phila. B. Franklin and D. Hall. 1755. 4to. 32 pp.

There are very interesting notes on the Atlantic slope (pp. 6-8) and on the rivers (pp. 22-24).

1768.

Jeffrys, Thomas. Topography of North America and the West Indies. London, 1768.

1770.

Anon. An Abstract of Sundry papers and proposals for improving the inland navigation of Pennsylvania and Maryland.

Trans. Amer. Phil. Soc., o. s. vol. i. 1770, pp. 357-364. map.

Gives early account of country and distances between Philadelphia and Susquehanna river.

1776.

Pownall, T. Topographical description of such parts of North America as are contained in the (annexed) map of the British middle colonies, etc., in North America. London, 1776.

1778.

Burnaby, Andrew. Travels through the Middle Settlements in North America in the years 1759 and 1760; with observations upon the State of the Colonies.

(Repub.) Pinkerton's Voyages and Travels, vol. xiii, London, 1812, pp. 701-752.

This is from the 3rd edition, London, 1798. Pages 725-727 deal particularly with his journey in Maryland.

Hutchins, Thos. A Topographic Description of Virginia, Pennsylvania, Maryland and North Carolina. London, Printed for the author in MDCCLXXVIII.

Less mention of Maryland than the title would indicate, chiefly deals with country west of Pittsburgh.

1784.

Swedenborg, Emanual. Regnum Subterraneum sive Minerale de Ferro. [etc.] Dresdae et Lipsiae. MDCCCLXXXIV.

Paragraphus XIII, entitled "Modus venam ferri coquendi, ferrumque crudam recoquendi Marylandiae & Pensilvaniae in India occidentali." contains references to the Principio furnaces, pp. 162-163. This volume is the second of three which deal with the official survey of Sweden.

1787.

Schoepf, Johann David. Beiträge zur mineralogischen Kenntniss des östlichen Theils von Nord-Amerika und seinen Gebirge. 194 pp. Erlangen, 1787.

1788.

Jefferson, Thomas. Notes on the State of Virginia. Phila. 1788. sm. 8vo. 244 pp.

The author gives many interesting facts and speculations concerning the geology about Harper's Ferry. Fully ten editions of this book were published in different places between 1782 and 1832, each with different number of pages.

1796.

Carey, M. Carey's American Pocket Atlas containing the following maps, viz. . . . with a concise Description of each State. Phila. 1796. 12mo. 118 pp.

Contains a small map of Maryland with a short description, pp. 91-94.

1807.

Scott, Joseph. A Geographical description of the states of Maryland and Delaware. Phila., Kimber, Conrad & Co., 1807.

Contains brief enumeration of rivers, bays, islands; also description of its natural features, trade, education, counties and towns. A valuable little summary of Maryland's resources as then known, accompanied by a small map showing the location of twenty-one towns.

1809.

Godon, Silvain. Observations to serve for the Mineralogical Map of the State of Maryland. (Read Nov. 6, 1809.)

Trans. Amer. Phil. Soc., o. s. vol. vi, 1809, pp. 319-323.

Observations on the area about Washington and Baltimore.

Latrobe, B. H. An account of the Freestone Quarries on the Potomac and Rappahannock rivers. (Read Feb. 10, 1807.)

Trans. Amer. Phil. Soc., o. s. vol. vi, 1809, pp. 283-293.

Describes the geological formations below Mt. Vernon and the Piscataway river.

Maclure, Wm. Observations on the Geology of the United States, explanatory of a Geological Map. (Read Jan. 20, 1809.)

Trans. Amer. Phil. Soc., o. s. vol. vi, 1809, pp. 411-428.

Broad correlations and generalizations.

1810.

Hayden, H. H. ["Mineralogical and Geological Description of the Country surrounding Baltimore to the extent of about nine miles."]

Balt. Med. Phil. Lyc., vol. i, 1810, pp. 255-271.

A letter to Dr. Nathaniel Potter written in 1810. It contained a description of the Bare Hills, "which was subsequently republished in Dr. Bruce's Journal" (1814).

1811.

Maclure, Wm. Suite des observations sur la géologie des États-Unis. Journ. de phys., de chim. et d'hist. nat., vol. lxxiii. Paris, 1811. With map.

1814.

GILMOR, ROBT., JR. A Descriptive Catalogue of Minerals occurring in the vicinity of Baltimore, arranged according to the distribution méthodique of Hauy.

Bruce Min. Jour., vol. i, 1814, pp. 221-232.

Enumerates 43 minerals found within a range of 12 miles, "except in a few instances where the minerals were too interesting to pass unnoticed." Says Cathedral was built of granite from Falls of Patapsco about 10 miles out on the Frederick turnpike (p. 232).

1815.

MITCHILL, SAMUEL L. A detailed Narrative of the Earthquakes of 1811, 1812 and 1813 [abbreviated title]. (Read April 14 and May 12, 1814.)

Trans. Lit. and Phil. Soc. N. Y., vol. i, 1815, pp. 284-307.

Describes the phenomena as observed in Maryland, and suggests that the effects did not extend northeast of Maryland.

1816.

CLEAVELAND, PARKER. An elementary treatise on Mineralogy and Geology. 6 plates. 8vo. 668 pp. Boston, 1816.

Frequent reference to Maryland minerals.

1817.

MACLURE, WM. Observations on the Geology of the United States of America, with some remarks on the effect produced on the nature and fertility of soils by the decomposition of the different classes of rocks. With two plates. 12mo. Phila., 1817.

A classic work giving many references to the limits and character of the geological formations in Maryland. The text and map (120 m. to the inch) represent the Cretaceous extending southwest to the Susquehanna only. All land to the southeast of "Primitive" is "Alluvium" in Maryland. Pages 105-107 deal especially with Maryland.

1818.

MACLURE, WM. Observations on the Geology of the United States of America, with some remarks on the probable effect that may be produced by the decomposition of the different classes of Rocks on the nature and fertility of Soils. Two plates.

Republished in Trans. Amer. Phil. Soc., vol. i, n. s., 1818, pp. 1-91.

MITCHILL, SAMUEL L. Cuvier's Essay on the Theory of the Earth. To which are now added Observations on the Geology of North America. 8vo. 431 pp. Plates. New York, 1818.

Numerous local references especially about Harper's Ferry (339-344), Eastern Shore (393-394), Washington (395-397). The book contains three figures of an elephant's tooth from Maryland.

1819.

Cornelius, Elias. On the Geology, Mineralogy, Scenery and Curiosities of Virginia, Tennessee and the Alabama and Mississippi Territories, etc., with miscellaneous remarks in a letter to the editor.

Amer. Jour. Sci., vol. i, 1819, pp. 214-226.

Refers to "Point of Rocks" breccia without mentioning exact locality.

Hayden, H. H. Red Pyroxene Augite. Extract of a letter to the editor from Dr. H. H. Hayden of Baltimore.

Amer. Jour. Sci., vol. i, 1819, p. 244.

This is an incidental reference in which no locality is given, and the description is insufficient to determine the true character of the mineral found.

1820.

Hayden, H. H. Geological Essays; or an Inquiry into some of the Geological Phenomena to be found in various parts of America and elsewhere. 8vo. pp. 412. Baltimore, 1820.

Cites Maryland localities, especially about Baltimore, in support of his theory. Cites the finding of numerous mastodon teeth in Maryland.

1821.

Nuttall, Thomas. Observations on the Geological Structure of the Valley of the Mississippi. (Read Dec., 1820.)

Jour. Acad. Nat. Sci. Phila., o. s. vol. ii, 1821, pp. 14-52.

Cites Annapolis as northern limit of the "second Calcareous formation," p. 35.

Troost, G. Description of a variety of Amber and of a Fossil Substance supposed to be the nest of an Insect discovered at Cape Sable, Magothy River, Anne Arundel County, Maryland.

Amer. Jour. Sci., vol. iii, 1821, pp. 8-15.

Besides the descriptions are notes on the geological occurrence and associated minerals and fossils.

1822.

Cleaveland, Parker. An elementary treatise on Mineralogy and Geology. 6 plates. 2nd Edit. in 2 vols. Boston, 1822.

Frequent references to Maryland minerals. Maclure's map is reproduced.

Seybert, Henry. Analysis of the American Chromat of Iron.

Amer. Jour. Sci., vol. iv, 1822, pp. 321-323.

The sample analyzed was obtained from the Bare Hills, Baltimore County, Md.

Struve, Baron von. Beiträge zur Mineralogie und Geologie des nordlichen Amerikas. 12mo. Hamburg, 1822.

1823.

Anon. Report by the Maryland Commission on a Proposed Canal from Baltimore to Conowago, with maps and profiles. Baltimore, 1823.

(Rev.) N. A. Rev., vol. xviii, 1824, p. 217.

Gives many figures on Maryland elevations based on lines of level run from Baltimore to York and to Havre de Grace.

1824.

Finch, John. Geological Essay on the Tertiary Formations in America. (Read Acad. Nat. Sci. Phila., July 15, 1823.)

Amer. Jour. Sci., vol. vii, 1824, pp. 31-43.

Objects to Maclure's use of Alluvium and shows that the formations so called are mostly Tertiary. Several Maryland localities studied.

Harper, General [R. S.]. Speech to the Citizens of Baltimore on the expediency of promoting a connexion Between the Ohio, at Pittsburg and the waters of the Chesapeake at Baltimore by a Canal through the District of Columbia, with his reply to some of the objections of Mr. Winchester.

Delivered at a meeting held at the Exchange on the 20th day of December, 1823. Baltimore, 1824, 78 pp., map.

(Rev.) N. A. Rev., vol. xviii, 1824, p. 217.

Say, Thomas. An Account of some of the Fossil Shells of Maryland.

Jour. Acad. Nat. Sci. Phila., vol. iv, 1824, pp. 124-155. Plates 7-13.

Tentatively correlates Maryland deposits with those of South Carolina and then discusses and figures 38 new species.

Shriver, James. An Account of the Examination and Surveys, with Remarks and Documents relative to the projected Chesapeake and Ohio and Lake Erie Canals. Baltimore, 1824, pp. 116, map.

Contains an account of surveys and observations made along the summit of Alleghany mountain during a location survey of the Chesapeake and Ohio Canal. Includes remarks on the minerals and geological formations of the area traversed.

1825.

Bernard, S., and Totten, Jas. E. Report of the Board of Internal Improvement on the Chesapeake and Ohio Canal. Feb. 2, 1825.

See Merrill, 1874.

Chambers, E. F. Report of the Commissioners concerning the Western Limits of the State. Annapolis. n. d. 8vo. 7 pp. [1825].

Md. Public Documents.*

* There seems to be no standard title for these publications, as they are variously named even in the sets of the State Library. They are also bound up differently.

Robinson, Samuel. A Catalogue of American Minerals, with their localities. Boston, 1825.

Pages 195-201 are devoted to minerals from Maryland. Retinasphaltum is mentioned in the Appendix, p. 302.

Sparks, Jared. Baltimore.

N. A. Review, vol. xx, 1825, pp. 99-138.

The article contains a discussion on the intercourse of Baltimore with the western country by means of canals and turnpikes. Reference to iron ore in abundance, copper works with 600,000 pounds capacity; copper sulphuret mines in Frederick County, the source of copper for Capitol dome at Washington (p. 130).

Troost, G. Description and Chemical Analyses of the Retinasphalt discovered at Cape Sable, Magothy River, Anne Arundel County, Md. (Read Dec. 19, 1823.)

Trans. Amer. Phil. Soc., n. s. vol. ii, 1825, pp. 110-115.

Describes retinasphalt, earthy retinasphalt and amber occurring intermixed with wood and pyrites at Cape Sable.

Van Rensselaer, Jer. Lectures on Geology; being outlines of the science, delivered in the New York Atheneum in the year 1825. 8vo. pp. 358. New York, 1825.

Only general references to Maryland.

1826.

Bernard, S., Poussin, Wm. Tell, Howard, W. Report of the Board of Internal Improvement.

See Merrill, 1874.

Dekay, J. E. Anniversary Address on the Progress of the Natural Sciences in the United States, delivered before the Lyceum of Natural History of New York, Feb. 1826. New York, 1826.

Only general references to Maryland.

Dunlop, J. Memoir on the Controversy between William Penn and Lord Baltimore respecting the boundaries of Pennsylvania and Maryland. 38 pp.

Mem. Penn. Hist. Soc., vol. i, 1826, pp. 159-196.

Pierce, James. Practical remarks on the shell marl region of the eastern parts of Virginia and Maryland, and upon the bituminous coal formations of Virginia and the contiguous region.

Amer. Jour. Sci., vol. xi, 1826, pp. 54-59.

Extracts from a letter; economic in character. Mentions exposures at Marlboro and discusses the relative value of marls.

1827.

Bernard, S., and Poussin, W. T. Letter from the Postmaster General transmitting report of General Bernard on surveys of routes for a Post Road from Baltimore to Philadelphia. Washington, 1827.

Gives a map and notes on the geological formations and soils along the different routes.

Disbrow, Levi. Notice of some recent experiments in boring for fresh Water, and of a pamphlet on that subject.

Amer. Jour. Sci., vol. xii, 1827, pp. 136-143.

Gives sections passed through at Washington and Baltimore.

Morton, S. G. Description of a new species of Ostrea; with some Remarks on the O. convexa of Say. Read May 1, 1827.

Jour. Acad. Nat. Sci. Phila., vol. vi, 1827, pp. 50-51.

Describes and figures Ostrea falcata, from the Delaware and Chesapeake Canal near St. George's.

1828.

Anon. First Annual Report of the Board of Engineers to the Board of Directors of the B. & O. R. R. 43 pp. Map of route from Baltimore to Ellicott's Mills.

Reviewed by Peter H. Cruse in N. A. Rev., vol. xxviii, 1829, pp. 166-186.

Anon. Report of the Engineers, on the Reconnaissance and Surveys made in reference to the Baltimore and Ohio R. R. 8vo. 188 pp. 1828.

Reviewed by Peter H. Cruse in N. A. Rev., vol. xxviii, 1829, pp. 166-186.

Carpenter, George W. On the Mineralogy of Chester County, with an account of some of the Minerals of Delaware, Maryland and other Localities.

Amer. Jour. Sci., vol. xiv, 1828, pp. 1-15.

Also published separately, 12mo, pp. 16, Phila., 1828 (Md. ref., p. 14).

Gives brief lists of minerals occurring near the Falls of North East Creek (Cecil County) near Cooperstown (Harford County). Reference to the Magnesite of the Bare Hills (Baltimore County) then employed in the manufacture of Epsom Salts. Includes only schorl, actinolite, magnetite, talc, and mangesite (p. 13).

Morton, S. G. Description of two new species of Fossil Shells of the genus Scapphites and Crepidula: with some observations on the Ferruginous Sand, Plastic Clay, and Upper Marine Formations of the United States. (Read June 17, 1828.)

Jour. Acad. Nat. Sci. Phila., vol. vi, 1828, pp. 107-119.

Gives list of Maryland fossils from "Upper Marine Beds" and discusses the European correlation.

——— Description of the Fossil Shells which characterize the Atlantic Secondary Formation of New Jersey and Delaware; including four new species. (Read Dec. 11, 1827, Jan. 1, 1828.)

Jour. Acad. Nat. Sci. Phila., vol. vi, 1829, pp. 72-100. Plates iii-vi.

This paper is intended as a supplement to the Vauuxem-Morton paper, and while the individual forms described are not from Maryland, this is included because of its relation to the first paper and the fact that the forms here described are highly developed in Maryland. This folio was printed January, 1828.

Vanuxem, L., and Morton, S. G. Geological Observations on Secondary, Tertiary, and Alluvial formations of the Atlantic coast of the United States arranged from the notes of Lardner Vanuxem. (Read Jan. 1828.)

Jour. Acad. Nat. Sci. Phila., vol. vi, 1829, pp. 59-71.

Reference to Maryland Tertiary formations and a number of fossils cited on pp. 67-68. Objects to Say's genus "Dispotea." This folio was printed Jauuary, 1828.

1829.

Anon. Third Annual Report of the President and Directors to the Stockholders of the B. & O. R. R. 8vo. 105 pp.

Map embracing various routes and profiles of the two principal routes surveyed for the B. & O. from Baltimore to Williamsport.

Livermore & Dexter. A collection of fossil earths, and minerals from the deep cut of the Delaware and Chesapeake Canal, with memoir and profile of geological strata developed in progress of work.

Proc. Amer. Phil. Soc., vol. xxii (2), 1884, p. 594.

Mentioned in Minutes Proc. Amer. Phil. Soc., 1743-1838.

1830.

Anon. Fourth Annual Report of the President and Directors to the Stockholders of the Baltimore and Ohio Railroad Company. 8vo. 153 pp. 1830.

Engineer's Report. Map [same as in 3rd Ann. Rept.].

Anon. Gold in Maryland.

Amer. Jour. Sci., vol. xvii, 1830, p. 202.

Brief note on its recent discovery. "It is known to exist in Virginia, and these localities, with those of North Carolina, appear to form a straight line parallel or nearly so, it is believed, with the Alleghany range. Quartz is abundant in the region about that (locality not given) discovered in Maryland, as is the case also in that of North Carolina."

Byrens, Daniel. Suggestions as to a union of effort to obtain a correct account of the variation of the magnetic needle.

Amer. Jour. Sci., vol. xviii, 1830, pp. 380-381.

Declination determined as ten to fifteen minutes west variation.

CONRAD, T. A. On the Geology and Organic Remains of a part of the Peninsula of Maryland.

Jour. Acad. Nat. Sci. Phila., vol. vi, pt. 2, 1830, pp. 205-230, with two plates.

Appendix contains figures of 29 new species of fossil shells noticed in the preceding pages. Describes the geological occurrence at St. Mary's, Charlotte Hall and Piscataway and correlates with London clay, upper Marine.

——— Description of Fifteen New Species of Recent and Three of Fossil Shells, chiefly from the Coast of the U. S.

Jour. Acad. Nat. Sci. Phila., vol. vi, 1830, pp. 256-268, plate.

Includes Cardium laqueatum, Arca maxillata (cast), Venus alveata.

MORTON, SAMUEL G. Synopsis of the Organic Remains of the Ferruginous Sand Formation of the United States, with Geological remarks.

Amer. Jour. Sci., vol. xvii, 1830, pp. 274-295; vol. xviii, 1830, pp. 243-250.

Remarks on the section of the Deep Cut of the Chesapeake and Delaware Canal, with brief description of several fossils and references to Algonium from the greensand below Annapolis (p. 228).

SHEPARD, C. U. On the Mineralogical and Chemical characters of Deweylite [etc.]

See Tyson, P. T. 1830.

TYSON, PHILIP T. Notice of some Localities of Minerals in the counties of Baltimore and Harford, Md., with an Appendix by C. U. Shepard (on Deweylite).

Amer. Jour. Sci., vol. xviii, 1830, pp. 78-84.

Localities for the following minerals are given: Fine-grained dolomite, chalcedony, tourmaline, precious garnet, common garnet, white augite, talc, magnesian hydrate of silica, precious serpentine, compact asbestus, flexible asbestus, graphite (lamellar), pyritous copper, iron pyrites and magnetic oxide of iron. The appendix by Charles U. Shepard is "On the Mineralogical and Chemical character of Deweylite and the probable identity of Magnesian hydrate of Silica with this species," pp. 81-84.

1831.

ANON. Fifth Annual Report of the President and Directors to the Stockholders of the Baltimore and Ohio Rail Road Company. 8vo. 130 pp. 1831.

Folded map and profile of the route of the B. & O. from Baltimore to Point of Rocks; and of the lateral road to Frederick. Second Annual Report of the Chief Engineer.

Map of a route from Baltimore to Washington.

BRONGNIART, ALEX. Rapport sur un Mémoire de M. Dufresnoy, Ingenieur des Mines, ayant pour titre: Des Caracteres particuliers que presente le terrain de Craie dans le Sud de la France et sur les pentes des Pyrenees. Fait à l'Acad. roy. d. Sci., Apr. 1831.

Annales des Sc. Naturelles, t. xxii, 1831, pp. 436-463, Plate XIV.

Pages 460-461 the author refers to Dufresnoy's correlation of the New Jersey and Maryland deposits and accepts the views of Dufresnoy. The conclusions are based on the work of Morton.

Hayden, H. H. Notices of the Geology of the Country near Bedford Springs in Pennsylvania, and the Bath, or Berkeley Springs in Virginia, with remarks upon the waters.

Amer. Jour. Sci., vol. xix, 1831, pp. 97-104.

Numerous notes on the geology of the narrow portion of Maryland about Hancock.

Owen, J. S. Fossil remains, found in Anne Arundel County, Maryland.

Amer. Jour. Geol., Phila., vol. i, 1831, pp. 114-118.

Columnar section at Anne Arundel in a well 72 feet deep where several vertebrae of whales were found.

1832.

Anon. Communication from the President of the Baltimore and Ohio Rail Road Company to the Legislature of Maryland, enclosing surveys and estimates of the railroad from Baltimore to Washington. 8vo. 13 pp. 1832.

Anon. Correspondence between the Executive of Maryland and the President of the United States and Secretary of War relative to a Survey of the Sea Coast between the Chesapeake and Delaware Bays. Annapolis, 1832. sm. 8vo. 7 pp.

Md. Pub. Doc., Dec. Sess., 1831.

Conrad, T. A. Fossil Shells of the Tertiary Formations of North America illustrated by figures drawn on Stone from Nature. Phila. 46 pp. [vol. i, pt. 1-2 (1832), 3-4 (1833).

(Repub.) by G. D. Harris, Washington, 1893.

Contains plates and descriptions of many of the typical fossil species of Maryland. (Part 3 was republished with plates, March 1, 1835.)

Durand, Elias. On the Green Color and Nature of the coloring Agent of the Water of the Delaware and Chesapeake Canal, near the first lock on the Chesapeake side.

Jour. Phila. Col. of Pharmacy, vol. iii, 1832, pp. 276-277.

Shows color is not due to copper in solution, but to sulphate of iron which results from the decomposition of iron pyrites found in the banks.

Johnson, W. C. Report of the Committee on Internal Improvement to the Legislature of Maryland. W. C. Johnson, Chairman. 8vo. 32 pp. 1832.

Md. Pub. Doc., Dec. Sess., 1831.

Completion of the road to the Potomac, and engineer's report on Washington Branch Road.

MORTON, S. G. On the analogy which exists between the Marl of New Jersey, &c., and the Chalk formation of Europe.

Amer. Jour. Sci., vol. xxii, 1832, pp. 90-95.

Published separately.

Includes extracts from the Reports on the Memoir of M. Dufresnoy, &c. Read before the French Institute, April 25, 1831. Reference to Dr. Morton's work on the Cretaceous of Maryland, pp. 93, 95 (see Brongniart, 1831).

PIGMAN. Report and Resolution relative to the Southern and Western Limits of this State. Annapolis, 1832. sm. 8vo. 22 pp.

Md. Pub. Doc., Dec. Sess., 1831.

POMEROY, SAM. WHYLLYS. Remarks on the Coal Region between Cumberland and Pittsburgh, and on the Topography, Scenery, etc., of that portion of the Alleghany Mts. [Letter written Nov. 1831.]

Amer. Jour. Sci., vol. xxi, 1832, pp. 342-347.

RUFFIN, ED. An Essay on Calcareous Manures.

(See Ruffin, 1842.)

1833.

AXON. Seventh Annual Report of the President and Directors to the Stockholders of the Baltimore and Ohio Rail Road Company. 8vo. 194 pp. 1833.

Folded map and profile of the projected lateral railroad to the city of Washington in connection with the first nine miles of the B. & O. R. R., showing the entire route from Baltimore to Washington. Scale, one mile to the inch.

BERTHIER, P. Analysis of Fer Titané of Baltimore.

Amer. Jour. Sci., vol. xxiv, 1833, pp. 375-376.

Extracted from Annales des Mines, tom. iii, p. 39.

——— Analyse de divers Mineraux Metalliques. Fer Titané de Baltimore en Maryland.

Ann. des Mines, 3me serie, tome iii, 1833, pp. 41-43.

Brief account of the minerals, their occurrence and properties.

DURAND, E. On the Alum and Copperas Manufactury of Cape Sable, Md.

Jour. Phila. Col. Pharmacy, vol. v, 1833, p. 12.

A letter written in 1817 describing the works formerly carried on by Dr. Troost.

FINCH, I. Travels in the United States of America and Canada. 8vo. 455 pp. London, 1833.

Has a chapter devoted to Fort Washington and St. Mary's; also other incidental references to geology.

HAYDEN, H. H. Description of the Bare Hills near Baltimore.

Amer. Jour. Sci., vol. xxiv, 1833, pp. 349-360, map.

The position of various localities for minerals occurring here is carefully described and indicated on the accompanying map.

JENKINS, L. W., Chairman. Report of the Select Committee relative to the Expediency of procuring a Map of the State.

Md. House of Delegates, Dec. Sess., 1832, Annapolis, 1833, 8vo, 10 pp.

Contains a few remarks on the mineralogical features of the State by Ducatel.

LEA, ISAAC. Contributions to Geology. 237 pp. 6 plates. Phila. 1833.

(Rev.) Amer. Jour. Sci., vol. xxv, 1834, pp. 413-423.

General discussion of the Tertiary of Alabama. New Tertiary fossil shells from Maryland and New Jersey, and description of new forms from New Jersey and of the Turfaceous Lacustrine formation of Syracuse, N. Y. The descriptions and figures include the new forms Balanus finchii, Mactra clathrodon, Rotella nana, Fusus pumilus, Miliola marylandica from St. Mary's; Fort Washington deposits are correlated with those of Claiborne, Ala.

MORTON, SAMUEL G. Supplement to the "Synopsis of the Organic Remains of the Ferruginous Sand Formation of the United States," contained in vols. xvii and xviii of this Journal.

Amer. Jour. Sci., vol. xxiii, 1833, pp. 288-294; vol. xxiv, pp. 123-132, plate ix.

Traces the southern extension of the greensand districts of New Jersey, Delaware and Maryland.

Discusses the general stratigraphic position and accepts the term Cretaceous for the group.

1834.

ANON. Eighth Annual Report of the President and Directors to the Stockholders of the Baltimore and Ohio Rail Road Company. 8vo. 57 pp. 1834.

Contains Fifth Annual Report, Chief Engineer.

Map and Profile of the Sixth Division, extending from Point of Rocks to Harper's Ferry Bridge.

AIKIN, WILLIAM E. A. Some notices of the Geology of the Country between Baltimore and the Ohio River, with a section illustrating the superposition of the rocks.

Amer. Jour. Sci., vol. xxvi, 1834, pp. 219-232, plate.

The most complete description of the geology of Central and Western Maryland published up to the time of its appearance.

BLAKISTON, WM. I. Report of the Joint Committee on the Boundary Lines between Virginia and Maryland. Annapolis, 1834. 8vo. 11 pp.

Md. Pub. Doc., Dec. Sess., 1833.

Includes a report by Thos. Cresap.

CLEMSON, THOS. G. Extract of Observations on the Geology of York County, Pa.

Trans. Geol. Soc. Penn., vol. i, pt. 1, appendix 13 pp.

Advocate of Sci. & Amer. Nat. Hist., vol. i, 1834, pp. 163-175.

CONRAD, T. A. Observations on the Tertiary and more recent formations of a portion of the Southern States.

Jour. Acad. Nat. Sci., Phila., vol. vii, 1834, pp. 116-129.

States the Eocene as extending southwest from Maryland, and regards the Mt. Washington bluff as younger than that at Claiborne.

Appendix to above, pp. 129-157.

Describes shells from St. Mary's (135), Choptank (136, 144, 150, 151, 152, 155).

DUCATEL, J. T., and ALEXANDER, J. H. Report on the Projected Survey of the State of Maryland, pursuant to a resolution of the General Assembly. 8vo. 39 pp. Annapolis, 1834. Map.

Md. House of Delegates, Dec. Sess., 1833, 8vo, 39 pp.

Another edition, Annapolis, 1834, 8vo, 58 pp., and map.

Another edition, Annapolis, 1834, 8vo, 43 pp., and folded table.

Amer. Jour. Sci., vol. xxvii, 1835, pp. 1-38.

Results of a preliminary survey of the State. The area and formations of the State are divided into three divisions corresponding to the present Coastal Plain, Piedmont Plateau and Appalachian areas. Many local descriptions and references are given with marked tendency towards economic point of view.

HACHEWELDER, JOHN. Names which the Lenne Lenape or Delaware Indians, who once inhabited this country, have given to Rivers, Streams, Places, etc.

Trans. Amer. Phil. Soc., vol. iv, 1834, pp. 351-396.

(Repub.) Trans. Moravian Soc., vol. i, Nazareth, 1876, pp. 225-282.

Gives the derivation and signification of some twenty-five local names, especially those of rivers.

HARLAN, R. Critical Notices of Various organic remains hitherto discovered in North America. (Read May 21, 1834.)

Trans. Geol. Soc. Pa., vol. i, part 1, 1834, pp. 46-112.

Med. Phy. Researches, 1835, [with a few additions].

The author mentions specimens of Equus callabus "found in excavating for the Chesapeake and Ohio Canal near Georgetown, D. C., not far from the Potomac River" (p. 61).

MERCER, CHAS. FENTON. Report of the Hon. Charles Fenton Mercer [on the Chesapeake and Ohio Canal].

House Misc. Doc., 23rd Cong., 1st Sess., Doc. 414. Washington, 1834, 378 pp.

Appendix Z and pages 248-301 are particularly interesting and give many facts on the coal and iron.

Merrick, Wm. D., Chairman. Report of the Committee on Internal Improvement relative to a Map and Survey of the State of Maryland. Annapolis, 1834, 8vo, 6 pp.

Md. House of Delegates, Dec. Sess., 1833.

Morton, S. G. Synopsis of the organic remains of the Cretaceous group of the United States. To which is added an appendix containing a tabular view of the Tertiary fossils hitherto discovered in North America. 8vo, 88 pp. Phila. 1834.

(Abst.) Amer. Jour. Sci., vol. xxvii, 1835, pp. 377-381.

Pigman. Mr. Pigman's Second Report relative to the Southern and Western Boundaries of this State, with the accompanying Documents. 8vo. 11 pp. [Annapolis, 1834.]

Md. Pub. Doc., Dec. Sess., 1833.

1835.

Alexander, J. H. Engineer's report 1834 (issued separately).

(See Ducatel and Alexander.)

——— Report on the New Map of Maryland 1834. n. d. 8vo. 15 pp.

Md. Pub. Doc., Dec. Sess., 1834.

Anon. Ninth Annual Report of the President and Directors to the Stockholders of the Baltimore and Ohio Rail Road Company. 8vo. 174 pp. 1835.

Contains as appendix A, Sixth Annual Report of the Chief Engineer.

Folded map of the country between Cumberland and the Ohio.

Bache, A. D., and Courtenay, E. H. . Observations to determine the Magnetic Dip at Baltimore, Philadelphia, New York [etc.]. (Read Nov. 7, 1834.)

Trans. Amer. Phil. Soc., vol. v, n. s., 1835, pp. 209-215.

Conrad, T. A. Observations on a portion of the Atlantic Tertiary Region.

Trans. Geol. Soc. Penn., vol. i, 1835, pp. 335-341, pl. 13.

Upper Marlboro and Piscataway, Md., deposits considered; also those of City Point, Va.

Includes figures and descriptions of *Panopea elongata, Modiola cretacea, and Turritella humerosa. Considers the formations to be either Eocene or Neocene and not Miocene, as there is no general transition. The Marls he regards as Tertiary, not Cretaceous.

——— Observations on the Tertiary Strata of the Atlantic Coast.

Amer. Jour. Sci., vol. xxviii, 1835, pp. 104-111, 280-282.

This paper includes a list of Newer Pliocene fossils from Benner's plantation, on the Neuce river, below Newbern, N. C., and from the Potomac river, with a description of their occurrence and a discussion of the Pliocene. Cites St. Mary's river as Medial Pliocene, pp. 104-111.

Reference to the Newer Pliocene of Eastern Maryland, pp. 280-282.

Ducatel, J. T. Geologist's report 1834.

——— Another edition. Report of the Geologist to the Legislature of Maryland, 1834. n. d. 8vo, 50 pp. 2 maps and folded tables.

Discusses the source of the shell marl deposits on the Eastern Shore and the geology along the Potomac in Prince George's and Charles Counties. (See following.)

Ducatel, J. T., and Alexander, J. H. Report on the New Map of Maryland, 1834, [Annapolis] n. d. 8vo, 59, i, pp. Two maps and one folded table.

Md. House of Delegates, Dec. Sess., 1834.

Harlan, Richard. Notice of a Pleseosaurian and other fossil Reliquiae from the State of New Jersey.

Med. and Phys. Researches, 1835, pp. 383-385.

Describes a Manatus from western shore of Maryland (p. 385). See also Harlan, 1834.

Morton, S. G. Additional Observations (to Synopsis). 8vo. 4 pp. Phila., June, 1835.

Apparently published as a leaflet without pagination. Adds Gryphaea vomer to the Eocene forms of Upper Marlboro and Piscataway.

Ruffin, Edmund. An Essay on Calcareous Manures. 8vo. 2nd Edit. 116 pp. Shellbanks, Va., 1835.

See Ruffin, 1842.

Taylor, Richard C. Review of Geological Phenomena and the deductions derivable therefrom, in two hundred and fifty miles of sections in parts of Virginia and Maryland.

Trans. Geol. Soc. Penn., vol. i, 1835, pp. 314-325 (with colored sections).

The paper describes various sections, one of which extends from Winchester to Harper's Ferry and thence east to within 30 miles of Baltimore. This section is plate xvii, fig. 1.

1836.

Alexander, J. H. Report on the New Map of Maryland, 1835. 8vo, 34 pp. 6 maps.

Also 8vo, 42 pp. 6 maps.

Separate publications (see Ducatel and Alexander).

Anon. Charter, &c., of the George's Creek Coal and Iron Company, containing a detailed account of the Geology, &c., of this locality. 1836.

Booth, Jas. C. Report of the Examination and survey of the Coal lands, etc., belonging to the Boston Purchase, near Cumberland, in the State of Maryland. New York, D. Fanshaw, 1836.

A small pamphlet of 8 pp., containing an account of the coal seams, iron ore, limestone, fire-clay, and cost of production.

Ducatel, J. T. Report of the Geologist. n. d. 8vo, pp. 35-84. Plate.

Separate publication (see Ducatel and Alexander).

Ducatel, J. T., and Alexander, J. H. Report on the New Map of Maryland, 1835. 8vo, 84, 1 pp. [Annapolis, 1836.]

Md. Pub. Doc., Dec. Sess., 1835.

Another edition, 96, 1 pp. and maps and plate.

Engineer's Report, pp. 1-34.

Contains three maps for canals on Eastern Shore, one triangulation map of bay, and large scale contour maps of southern part of Western and Eastern Shores, with explanations.

Report of the Geologist, pp. 35-84.

Physical geography, geology and resources of Dorchester, Somerset, Worcester and St. Mary's counties.

——— Report of the Engineer and Geologist in relation to the New Map to the Executive of Maryland.

Md. Pub. Doc., Dec. Sess., 1835 [Annapolis, 1836], 8vo. 84, 1 pp., 6 maps and plates.

(Rev.) Amer. Jour. Sci., vol. xxx, 1836, pp. 393-394.

Jour. Franklin Inst., vol. xviii, n. s. 1836, pp. 172-178.

Shows the report to be economic and preliminary. Its appearance is the occasion for remarks on the organization and appropriations of the other then existing surveys.

Featherstonhaugh, G. W. Report of a Geological Reconnaissance made in 1835 from the seat of government by way of Green Bay and the Wisconsin Territory on the Coteau du Prairie, an elevated ridge dividing the Missouri from the St. Peters River. 169 pp. 4 plates. Washington, 1836.

Green, Duff. A Letter addressed to the General Assembly of Maryland, by Duff Green, on the Bill incorporating the Union Company. 1836.

Hughes, George W. Report of an Examination of the Coal Measures including the Iron-ore deposits, belonging to the Maryland Mining Company, in Allegany County, &c. &c. 1836.

JOHNSON, WM. COST. Report of the Hon. Wm. Cost Johnson to Congress.

House Misc. Doc., 26 Cong., No. 168, Washington, 1836.

PURVIS, M. On the use of Lime as a Manure.

Translated for Farmer's Register, Shellbanks, Va., 1835.

(Rev.) Amer. Jour. Sci., vol. xxx, 1836, pp. 138-163.

Reference to the occurrence of the greensand formations in Maryland, p. 160.

1837.

ALEXANDER, J. H.

(See Ducatel and Alexander.)

BACHE, A. D., and COURTENAY, E. H. Observations to determine the magnetic dip at Baltimore, Philadelphia, New York, West Point, Providence, Springfield, and Albany. (Read before Amer. Phil. Soc., Nov. 7, 1834.)

Trans. Amer. Phil. Soc., n. s. vol. v, 1837, pp. 209-211.

Observations taken opposite Holliday Street Theater in July, 1834, give mean dip 70° 58.6′.

DUCATEL, J. T. Outline of the Physical Geography of Maryland, embracing its prominent Geological Features.

Trans. Md. Acad. Sci. and Lit., vol. ii, 1837, pp. 24-54, with map.

General discussion with many local features and details.

DUCATEL, J. T., and ALEXANDER, J. H. Report on the New Map of Maryland, 1836. 8vo, 104 pp. and 5 maps. [Annapolis, 1837.]

Md. House of Delegates, Sess. Dec., 1836.

Another edition, 117 pp.

Report of the geologist deals with the geology of Frostburg and of Calvert, Anne Arundel, St. Mary's, Charles and Prince George's counties. Several maps and sections in black and white (pp. 1-60).

Engineer's report includes several small maps and their explanation, together with estimates on the location of certain canals and railroads (pp. 61-104).

ELDREDGE, N. T. Report of the Special Agent sent to examine the Mines of the Company. sm. 8vo, 13 pp. New York, 1837.

This is a report to the Boston and New York Coal Company, which is usually appended to the "Charters and By-Laws." It contains considerable information regarding the coal and iron deposits. There are opinions quoted. One analysis of the coal and 15 of the iron are given.

HUMPHREYS, H. The Latitude of Annapolis.

Trans. Md. Acad. Sci. and Lit., vol. i, part 1, 1837, pp. 135-137.

Notices some variations in compass needle and barometer during auroral displays of January 25, April 3 and 21 and 24, 1837. Also gives the magnetic variation at Annapolis; needle set up on the college green, St. John's College, as being 2° 41′ west. Latitude is determined as 38° 58′ 35.617″ north.

KERR, J. BOZMAN. Report of the Select Committee appointed to inquire into the expediency of repealing the act to provide for completing a New Map and Geological Survey of this State.

Md. Pub. Doc., Dec. Sess., 1837, Document [R], n. d., 8vo, accompanied by a letter from Alexander, 8 pp. [Annapolis, 1838].

METEOROLOGICAL COMMITTEE'S REPORT.

Trans. Md. Acad. Sci. and Lit., vol. i, part 1, 1837, pp. 138-147.

Besides a description of a barometer made for the Academy, there are given "Meteorological Observations made by the Maryland Academy of Science and Literature" on the 21st and 22d of June, 21st and 22d of September, 21st and 22d of December, 1836, on the 21st and 22d of March, 1837, at Baltimore. See pp. 174-186 for daily Meteorological Observations for year 1836 at Baltimore, Md.

ROGERS, W. B. and H. D. Contributions to the Geology of the Tertiary Formations of Virginia. (Read May 5, 1835.)

Trans. Amer. Phil. Soc., vol. v, n. s. 1837, pp. 319-341.

Objects to Conrad's considering the deposits on St. Mary's river under a new division called Middle Pliocene (p. 335).

TRIMBLE, ISAAC. Report of the Engineer on the Subject of the Maryland Canal. Baltimore, Lucas & Deaver, 1837.

Gives various routes for Maryland canal; gauging of various streams; monthly rainfall, etc. The report is accompanied by map (1/125,000) and profile.

TYSON, PHILIP T. A description of the Frostburg Coal Formation of Allegany County, Maryland, with an account of its geological position.

Trans. Md. Acad. Sci. and Lit., 1837, pp. 92-98, plate.

Gives a detailed section from Dug Hill to George's Creek; also records the finding of Glassopteris phillipsii, calamites, etc. Believes the elevation of Wills Mt. took place before the coal series was deposited.

——— A descriptive Catalogue of the principal minerals of the State of Maryland.

Trans. Md. Acad. Sci. and Lit., 1837, pp. 102-117.

Divides the state into six divisions and enumerates the minerals for each, but does not give the full list of minerals from the western counties.

1838.

ANON. Report upon the Surveys for the Extension of the Baltimore and Ohio Rail Road from its Present Termination near Harper's Ferry, on the Potomac, to Wheeling and Pittsburg on the Ohio river. 8vo. pp. 138.

ALEXANDER, J. H. Communication from the Topographical Engineer. 8vo. pp. 5-8. [Annapolis, Feb. 19, 1838.]

Md. Pub. Doc., Dec. Sess., 1837.

Deals with the expense of the New Map.

Conrad, T. A. Fossils of the Medial Tertiary of the United States. No. 1, 1838. [Description on cover 1839 & '40.] 32 pp. Plates I-XVII.

(Repub.) by Wm. H. Dall, Washington, 1893.

The description of many type forms characteristically developed in Maryland.

Daubeny, Chas. Sketch of the geology of North America, being the substance of a memoir read before the Ashmolean Society, November 26, 1838. 78 pp. 1 plate. Oxford, 1839.

(Absts.) Amer. Jour. Sci., vol. xli, 1842, pp. 195-199; Bull. Soc. Geol. France, vol. xi, 1840, pp. 221-225.

Few general references only.

Douglas, D. B. Report on the Coal and Iron Formation of Frostburg and Upper Potomac in the states of Maryland and Virginia. Brooklyn (?) 1838, with map.

Results of three weeks' investigation. Gives section beginning near Westernport, in which are enumerated twenty coal veins, ten very workable. Remarks on structure and several analyses of coal with reference to generation of heat.

Ducatel, J. T. Annual Report of the Geologist of Maryland. 1837. [Annapolis, 1838.] 8vo. 39, 1 pp. and 2 maps.

Md. Pub. Doc., Dec. Sess., 1837.

Includes discussion of the geology of Kent, Cecil and Montgomery counties, with remarks on coal in Frederick County.

Loomis, Elias. On the Variation and Dip of the Magnetic Needle in different parts of the United States (with map).

Amer. Jour. Sci., vol. xxxiv, 1838, pp. 290-307.

Many observations and records, including some made in Maryland.

Mackubin, Geo. Report of the Treasurer of the Western Shore to the House of Delegates, Respecting the Expenses incurred in making the Geographical and Geological surveys of the State. 8vo. 3 pp. [Annapolis, 1838.]

Md. Pub. Doc., Dec. Sess., 1837.

Silliman, B. Extracts from a report made to the Maryland Mining Company, 1838.

Wagner, William. Description of five new Fossils, of the older Pliocene formation of Maryland and North America. (Read Jan. 1838.)

Jour. Acad. Nat. Sci., Phila., vol. viii, 1838, pp. 51-53, with one plate.

Describes and figures Pecteu marylandicus, Venus inoceriformis, Trochus eboreus from Maryland, Panopea goldfusi, Mysia nucleiformis from North Carolina.

1839.

Anon. Report of the Treasurer of the Western Shore to the House of Delegates of Maryland. In obedience to their order of the 28th ultimo stating the Expenses incurred in making the Geographical and Geological Surveys of the State. n. d. 8vo, 2 pp. [Annapolis, 1839.]

Md. Pub. Doc., Dec. Sess., 1838.

Booth, Jas. C. First and Second Report of the Geological Survey of Delaware. 25 pp. Dover, 1839.

Conrad, T. A. Notes on American Geology. Observations on characteristic Fossils, and upon a fall of Temperature in different geological epochs.

Amer. Jour. Sci., vol. xxxv, 1839, pp. 237-251.

Reference to the Eocene deposits at Upper Marlborough and Piscataway, Md., as illustrations of deposition by gentle currents.

See also Conrad, 1838, and Dall, 1893.

Ducatel, J. T. Annual Report of the Geologist of Maryland, 1838. 8vo, map and illustrations. 33 pp. [Annapolis, 1839.]

Md. Pub. Doc., Dec. Sess., 1838.

Considers the geology and mineral resources of Harford and Baltimore counties; also contains a treatise on Lime (map of Cecil County).

Erickson, Captain. Report of Captain Erickson, Civil Engineer, London, showing the cost of the coal of the *Maryland Mining Company* per ton, delivered at the several cities of Washington, Baltimore, Philadelphia and New York. 1839.

Sheppard, F. Report to the Potomac and Allegany Coal and Iron Manufacturing Company. 1839.

Silliman, B. Extract from a report made to the Maryland and New York Coal and Iron Company. 1839.

Weld, Henry Thomas. A Report made by Henry Thomas Weld, Esq., of the Maryland and New York Iron and Coal Company's Land, &c.

Wharton. Report of the Select Committee appointed by the House of Delegates to Report a Bill to abolish the Office of State Geologist. n. d. 8vo. 3 pp. (1839).

Md. Pub. Doc., Dec. Sess., 1838 [L].

1840.

Alexander, J. H. Report on the Manufacture of Iron addressed to the Governor of Maryland by J. H. Alexander. Printed by order of the Senate. Annapolis, 1840, 8vo, 369 pp., 3 plates.

Deals particularly with the iron industry in Maryland, and gives many analyses.

Anon. Charters of the Union Potomac Company and the Union Company, with a description of their Coal and Iron Mines, &c. 1840.

Conrad, T. A. Fossils of the Medial Tertiary of the United States. No. 2. 1840. [Description on cover 1840-1842.] pp. 33-56. Plates XVIII-XXIX.

(Repub.) by W. H. Dall, Washington, 1893.

The descriptions of many typical Maryland forms. See also 1838.

Ducatel, J. T. Annual Report of the Geologist of Maryland, 1839. 8vo, 45 pp. [Annapolis, 1840.]

Md. House of Delegates, Dec. Sess., 1839.

This gives a history of the survey, and deals with the geology and physical geography and mineral resources of Frederick and Carroll counties. Maps of northern part of State in hachure.

Loomis, Elias. On the Variation and Dip of the Magnetic Needle in the United States.

Amer. Jour. Sci., vol. xxxix, 1840, pp. 41-50.

Gives determinations made at Baltimore.

1841.

Alexander, J. H. Trigonometrical Survey for the New Map of Maryland. 1841. n. d. 8vo. 8 pp. [Dated Feb. 2nd, 1841.]

Md. House of Delegates, Dec. Sess., 1840.

——— Trigonometrical Survey for the New Map of Maryland. 1841. n. d. 8vo. 4 pp. [Dated Feb. 19, 1841.]

Md. House of Delegates, Dec. Sess., 1840.

Booth, J. C. Memoir of the Geological Survey of the State of Delaware; including the application of the Geological Observations to Agriculture. I-XI, 9-188 pp. Dover, 1841.

Part I.—General view of the Geology of the State.

Part II.—Special Geology.

Part III.—Economical Geology. This includes numerous analyses and is followed by chapters on agriculture, arts of construction and chemical arts.

Conrad, T. A. Description of Twenty-six new Species of Fossil Shells discovered in the Medial Tertiary Deposits of Calvert Cliffs, Md.

Proc. Acad. Nat. Sci., Phila., vol. i, 1841, pp. 28-33.

DUCATEL, J. T. Annual Report of the Geologist of Maryland. 1840. 8vo. 46 pp. [Annapolis, 1840.] Map and sections.

Another edition, 8vo, 59 pp. and 3 plates: also Md. House of Delegates, Dec. Sess., 1840, n. d. 8vo. 43 pp., 3 plates.

Considers the physical geography and geology of Allegany and Washington counties, with notes on the copper mining about Frederick.

VANUXEM, L. On the Ancient Oyster Shell Deposites observed near the Atlantic Coast of the United States. [Read April 7, 1841.]

Proc. Assoc. Amer. Geol. Nat., pp. 21-23.

Cites several observations to prove the human origin of shell heaps.

1842.

ALEXANDER, J. H. Report of the Topographical Engineer to the Governor of Maryland. 8vo. 5 pp.

Md. Pub. Doc., Dec. Sess., 1841. (J)

CONRAD, T. A. Observations on a portion of the Atlantic Tertiary Region, with a description of new species of organic remains.

2nd Bull. Proc. Nat. Inst. Prom. Sci., 1842; plates, pp. 171-192.

The deposits of Upper Marlboro, Piscataway and Fort Washington, Md., are referred to the Eocene or Lower Tertiary, and correlated with the London Clay, Calcaire Grossier, Claiborne beds, etc. Columnar sections and lists of fossils with many localities along the bay.

——— Description of twenty-four new species of Fossil Shells chiefly from the Tertiary Deposits of Calvert Cliffs, Md. (Read June 1, 1841.)

Jour. Acad. Nat. Sci., Phila., vol. viii, 1842, pp. 183-190.

——— Descriptions of new Tertiary Fossils.

2nd Bull. Proc. Nat. Inst. Prom. Sci., 1842, pp. 192-194, two plates.

Plates show Ostrea sellaeformis, Pholadomya marylandica, Pholas petrosa, Isocardia markoei, Pecten humphreydii, Dispoteae constricta, Scalaria expansa, Buccinum integrum, Scutella alberti (the last is not figured, but described).

EHRENBERG, C. G. Verbreitung des Mikroskopischen Lebens als Felsmassen im centralen Nord Amerika und im westlichen Asien.

Bericht. k. p. Akad. der Wiss., Berlin, 1842, pp. 187-188.

Discusses the Polythalaimas of the Cretaceous and infers similar conditions to those existing off Northern Africa. No direct reference to Maryland.

HARLAN, R. Description of a New Extinct Species of Dolphin from Maryland.

2nd Bull. Proc. Nat. Inst. Prom. Sci., 1842, pp. 195-196, 4 plates.

The fossil is Delphinus calvertensis, which was found in the Calvert Cliffs.

——— Notice of two New Fossil Mammals from Brunswick Canal, Georgia; with observations on some of the fossil quadrupeds of the United States.

Amer. Jour. Sci., vol. xliii, 1842, pp. 141-144, 2 plates.

Tooth of Mastodon longirostris from the Miocene of Maryland, hitherto found only in Europe, mentioned incidentally, p. 143.

Loomis, Elias. On the Dip and Variation of the Magnetic Needle in the United States.

Amer. Jour. Sci., vol. xliii, 1842, pp. 93-116.

Differs from Courtenay in the value for the dip at Baltimore.

Markoe, Francis, Jr. [Remarks and list of fossils from Miocene.]

2nd Bull. Proc. Nat. Inst. Prom. Sci., 1842, p. 132.

Enumerates several new forms found with Mr. Conrad, which were later described by the latter.

Rogers, Henry D. An Inquiry into the Origin of the Appalachian Coal Strata—Bituminous and Anthracitic.

Trans. Assoc. Amer. Geol. and Nat., 1842, pp. 433-474.

A comprehensive general paper in which the author considers both the bituminous and anthracite formations to be continuous with each other, and that they extended form Peunsylvania to Alabama and eastward to the Appalachian valley. Such an extent is explicable only on assumption of the oceanic origin of coal

——— W. B. & H. D. On the Physical Structure of the Appalachian Chain as Exemplifying the Laws which have Regulated the Elevation of great Mountain Chains.

Repts. Amer. Assoc. Geol. and Nat., 1842, pp. 474-531.

(Absts.) British Assoc. Repts., 1824, Pt. II, pp. 40-42; Proc. Assoc. Amer. Geol. and Nat. 1840-42, pp. 70-71; Amer. Jour. Sci., vol. xliii, 1842, pp. 177-178; vol. xliv, 1843, pp. 359-362.

Part I deals with a description of the area, its divisions; their structure, especially inverted dip, length, persistence and parallelism of axes and the increasing interval between them to the northwest.

Part II deals with a theory of the flexure and elevation of the strata, which are due to a combined undulatory and tangential movement.

Ruffin, Ed. An Essay on Calcareous manures. 8vo. 316 pp. Petersburg, Va., 1842. 3rd Edit.

General discussion of the tidewater marls, pp. 194-234. First use of marl in Maryland in Talbot County, 1805, by Mr. Singleton. (1st Edit. 1832, 2nd Edit. 1835.)

1843.

Conrad, T. A. Description of a new Genus, and Twenty-nine new Miocene and one Eocene Fossil Shells of the United States.

Proc. Acad. Nat. Sci., Phila., vol. i, 1843, pp. 305-311.

Eleven of the specimens were found in Maryland.

DUCATEL, JULIUS T. [Physical History of Maryland.]

Proc. Amer. Phil. Soc., vol. iii, 1843, pp. 157-158.

Abstract of a paper presented before the Society, dealing with the physical features, geology, resources, etc.

NICOLLET, J. N. Observations of the Magnetic Dip, made in the United States in 1841. (Read Sept. 16, 1842.)

Trans. Amer. Phil. Soc., vol. viii, 1843, pp. 315-326.

Magnetic dip determined at several stations in Baltimore and Washington.

SILLIMAN, BENJ. Lecture VII. Coal, its Origin and Organic remains. Pittsburg, 1843.

Lectures on Geology delivered before the Wirt Institute and citizens of Pittsburgh in the Third Presbyterian Church.

The author on page 25 mentions fossil evidences near Cumberland of an abundance of marine plant life at epochs much earlier than the coal formation.

THOMSON, THOMAS. Notice of Some New Minerals.

Phil. Mag., 3rd ser., vol. xxii, 1843, p. 191.

Describes the hydrous magnesium silicate called Gymnite (Hintze) as "Baltimoreite," and gives an analysis.

1844.

ANON. Report of the Committee on Agriculture relative to the Application of Lime to the different Qualities of Soil and the use of calcareous Matter for agricultural Purposes. In obedience to an order of the House of the 27th of January.

Md. House of Delegates, Dec. Sess., 1843. Annapolis, 1844. 8vo, 15 pp.

B(AILEY), J. W. Account of some new Infusorial Forms discovered in the Fossil Infusoria from Petersburg, Va., and Piscataway, Md.

Amer. Jour. Sci., vol. xlvi, 1844, pp. 137-141, plate iii.

Describes some ten species and gives over thirty figures. There is appended to this paper an extract from a letter by Wm. B. Rogers, including notes on the Tertiary infusorial formation of Maryland.

EHRENBERG, C. G. Ueber zwei neue Lager von Gebirgsmassen aus Infusorien als Meeres-Absatz in Nord Amerika und eine Vergleichung derselben mit den organischen Kreide-Gebilden in Europa und Afrika.

Bericht. k. p. akad. Wiss., Berlin, 1844, pp. 57-97.

(Rev.) Amer. Jour. Sci., vol. xlviii, 1845, pp. 201-204. J. W. Bailey.

Enumerates sixty-eight species from Piscataway, including the following new ones: Asterolampra marylandica, Denticella tridentata, Dicladia cervus, Dictyocha tricantha, D. ubera, Discoplea americana, Lithobotrys quadriloba, Mesocena diodon, M. elliptica, Pyxidicula (?) actinoptychus, P. aculeata, P. gemmifera, P. hirsuta, P. limbata, P. oculus chamaeleontis, Rhaphoneis amphiceros, R. gemmifera, R. pretiosa, Rhizosolenia americana, Symbolophora trinatates, Lithasteriscus tuberculosus, L. reniformis.

JOHNSON, W. R. A Report to the Navy Department of the United States on American Coals applicable to steam navigation and to other purposes.

Exec. Doc. House, 28th Cong., 1st Sess., vol. vi, 1844. No. 276, pp. 1-607.

Sen. Doc. No. 386, 28th Cong., 1st Sess., vol. vi, June 6, 1844, 607 pp.

A classic paper, including a study of a few Maryland coals, showing their great evaporating power.

ROGERS, H. D. Address delivered at the Meeting of the Association of American Geologists and Naturalists.

Amer. Jour. Sci., vol. xlvii, 1844, pp. 137-160, 247-278.

General historical review and geological outline of the areas studied up to that time.

———, WM. B. [Tertiary Infusorial formation of Maryland.]

Amer. Jour. Sci., 2nd ser., xlvi, 1844, pp. 141-142.

Extract from letter to editor.

SHEPARD, CHAS. UPHAM. A Treatise on Mineralogy. 2nd Edit. 12mo. Boston, 1844.

Mentions many Maryland minerals and mineral localities. (1st edit., 1832.)

1845.

ALGER, FRANCIS. Beaumonite and Lincolnite identical with Heulandite.

Jour. Boston Soc. Nat. Hist., vol. iv, 1843-4, p. 422. Boston, 1845.

BAILEY, J. W. Notice of some New Localities of Infusoria, Fossil and Recent.

Amer. Jour. Sci., vol. xlviii, 1845, pp. 321-343, plate iv.

In Part III of this paper Bailey describes "Fossil Infusoria of Virginia and Maryland." The account includes a table showing the species of Infusoria, etc., found fossil at "Bermuda" and at various localities in the Tertiary of Virginia and Maryland.

——— [Summary and Review of Ehrenberg's Observations on the Fossil Infusoria of Virginia and Maryland, and a comparison of the same with those found in the Chalk Formations of Europe and Africa.]

Amer. Jour. Sci., vol. xlviii, 1845, pp. 201-204.

This is probably a review of "Ueber zwei neue Lager von Gebirgsmassen aus Infusorien," although the titles are different.

CONRAD, T. A. Fossils of the (Medial Tertiary or) Miocene Formation of the United States. No. 3. 1845. pp. 57-80. Plates xxx-xlv.

(Repub.) by W. H. Dall, Washington, 1893.

Original description of several Calvert Cliffs and St. Mary's fossils. See Conrad, 1838, 1840.

Forbes, Edw.
(See Lyell, Chas.)

Hughes, Jer. A Brief Sketch of Maryland, its Geography, Boundaries, History, Government, Legislation, Internal Improvements, &c. [By Jeremiah Hughes, Annapolis.] Printed for the Publisher, 1845. 18mo. pp. 41, 156.

Lonsdale, W.
Appendix Quart. Jour. Geol. Soc. London, vol. i, 1845, pp. 427-429.
(See Lyell, Chas.)

Lyell, Chas. Travels in North America, with Geological Observations on the United States, Canada and Nova Scotia. 2 vols. 12°. New York, 1845. Another edit. 2 vols. 12°. London, 1845. Second English edit. London, 1855. German edit. translated by E. T. Wolff, Halle, 1846.

Vol. ii, pp. 17-22 (London, 1845) gives observations on the Cumberland-Frostburg area, including a list of flora found. This volume has a geological map of the United States.

Lyell, Chas. Notes on the Cretaceous Strata of New Jersey and other Parts of the United States bordering the Atlantic.

Proc. Geol. Soc. London, vol. vi, 1843-1845, pp. 301-306.

Quart. Jour. Geol. Soc. London, vol. i, 1845, pp. 55-60.

(Abst.) Amer. Jour. Sci., vol. xlvii, pp. 213-214.

Deals principally with the New Jersey formations and correlates with the Maestricht-Gault. Appendix "On the Fossil Shells collected by Mr. Lyell from the Cretaceous Formations of New Jersey," by Edward Forbes, Charles Lyell and Wm. Lonsdale.

——— On the Miocene Strata of Maryland, Virginia and of North and South Carolina.

Quart. Jour. Geol. Soc. London, vol. i, 1845, pp. 413-427.

Discusses numerous fossils which are correlated with European and recent forms. Mentions a Mastodon longirostus tooth from Greensburgh, Caroline County, Md.

Appendix by W. Lonsdale on "Indications of Climate afforded by Miocene Corals of Virginia."

1846.

Anon. Report of the Committee on Agriculture in Relation to the appointment of an agricultural Chemist. n. d., 8vo, 8 pp.

Md. House of Delegates, Dec. Sess., 1846 [T].

Bunbury, C. J. F. On some remarkable Fossil Ferns from Frostburg, Md. collected by Mr. Lyell. (Read Dec. 3, 1845.)

Quart. Jour. Geol. Soc., London, vol. ii, 1846, pp. 82-91, 2 plates.

(Abst.) Amer. Jour. Sci., 2nd ser., vol. ii, 1846, pp. 427-428.

Describes and figures Pecopteris emarginata and P. elliptica (n. sp.). Also enumerates 18 more fossil plants found at Frostburg.

CONRAD, T. A. Observations on the Eocene formation of the United States, with descriptions of species of Shells, &c., occurring in it.

Amer. Jour. Sci., 2nd ser., vol. i, 1846, pp. 209-221, 395-405; plate i, ii, iii, iv.

Descriptions of species of Pholas, Pholadomya and Panopaea from Piscataway, Md.

Descriptions of species of Crassatella and Corbula from Piscataway, Upper Marlborough and the post Pliocene of Maryland.

LOCKE, JOHN. Observations made in the years 1838, '39, '40, '41, '42, and '43 to determine the Magnetical Dip and Intensity of Magnetical Force in several parts of the United States. (Read April 19, 1844.)

Trans. Amer. Phil. Soc., vol. ix, 1846, pp. 283-328.

Determines these constants at Baltimore, Washington, Cumberland and Emmitsburg.

SABINE, E. Contributions to Terrestrial Magnetism No. VII Containing a Magnetic Survey of a Considerable portion of the North American Continent.

Phil. Trans. Roy. Soc. London, vol. cxxxvi, pt. i, 1846, pp. 237-336.

1847.

CONRAD, T. A. Observations on the Eocene formation and descriptions of one hundred and five new fossils of that period from the vicinity of Vicksburg, Mississippi. With appendix.

Proc. Acad. Nat. Sci., Phila., vol. iii, 1847, pp. 280-299.

The author regards the Fort Washington, Piscataway and Upper Marlboro deposits as lower Eocene. (See Conrad, 1848.)

HALL, JAMES. Paleontology, Vol. I. Geological Survey of New York. Albany, 1847. Containing descriptions of organic remains of the lower division of the New York system.

Description and figures of numerous forms from Cumberland and vicinity.

KNIGHT, JONATHAN. Letter to T. Parkin Scott—advantages of the several termini on the Ohio river for the B. & O. R. R. 8vo. pp. 29.

LOOMIS, E. Notice of some recent Additions to our knowledge of the Magnetism of the United States and its Vicinity.

Amer. Jour. Sci., 2nd ser., vol. iv, 1847, pp. 192-198.

Gives determinations by Prof. Locke.

1848.

CONRAD, T. A. Observations on the Eocene Formation and descriptions of 105 new fossils of that period from the vicinity of Vicks-

burg, Miss. With an Appendix. [Descriptions of New Eocene Fossils in the cabinet of Lardner Vanuxem.]

Jour. Acad. Nat. Sci., Phila., 2nd ser., vol. i, 1848, pp. 111-134, plates 11-14.

Maryland and Virginia deposits are considered as "Lower or older Eocene" and equivalent to the fossiliferous sands of the Claiborne and St. Stephens, Ala., chiefly from the presence of Ostrea sellaeformis. Also gives a number of shells from Upper Marlboro, Md. (See Conrad, 1847.)

Gibbes, R. W. Monograph of the fossil Squalidae of the United States.

Jour. Acad. Nat. Sci., Phila., 2nd ser., vol. i, 1848, pp. 139-148.

Gives Carcharoden megaloden from Maryland (p. 143).

Lea, Henry C. Catalogue of the Tertiary Testacea of the United States.

Proc. Acad. Nat. Sci., Phila., vol. iv, 1848, pp. 95-107.

Gives references to descriptions but does not state localities. The list includes many Maryland forms.

Taylor, R. C. Statistics of Coal. The geographical and geological distribution of Mineral Combustibles or Fossil Fuel. 8vo. 745 pp. Phila. 1848.

Pages 65-71 deal with the "Maryland Division of the great Alleghany coal field," and give a geological profile of the Coal Basins of Maryland (p. 70).

A second edition was revised to 1854 by S. S. Haldeman, Philadelphia, 1855. pp. 316-325 for Maryland.

1849.

Bailey, J. W. New Localities of Infusoria in the Tertiary of Maryland.

Amer. Jour. Sci., 2nd ser., vol. vii, 1849, p. 437.

Short paper citing localities where infusoria have been found.

De Verneuil, Ed. Parallelism of the Paleozoic Formations of North America, with those of Europe.

Amer. Jour. Sci., 2nd ser., vol. vii, 1849, pp. 45-51. (Continued from pp. 183 and 370, vol. v, and p. 218, vol. vii.)

Abridged translation by James Hall of "Sur le parallelisme dans depots, etc." Bull. Geol. Soc. d. Fr., 2me ser., t. iv. The first two parts deal especially with geueral problems and the strata of New York. In the present paper there is a reference to Carboniferous Species occurring near Bloomsburg, Pa., and in Marylaud (p. 47).

The last paper deals with the correlation of the fossils.

Gibbes, R. W. Monograph of the fossil Squalidae of the United States.

Jour. Acad. Nat. Sci., Phila., 2 ser., vol. i, 1849, pp. 191-206. (Continued from p. 147 of same volume.)

Gives a number of species from Maryland specimens, pp. 192-196, 201.

Owen, Robert Dale. Hints on Public Architecture, containing among other illustrations views and plans of the Smithsonian Institution; together with an appendix relative to building materials. 1849. 4to. pp. 140-199. Woodcuts, 15 plates. (No. P.)

Gives many facts and figures concerning Maryland sandstones, marbles and granites, in the appendix.

1850.

Anon. Twenty-fourth Annual Report of the President and Directors to the Stockholders of the Baltimore and Ohio Rail Road Company. 8vo. 54 pp. 1850.

Folded map, showing route between Baltimore and St. Louis, together with the other principal lines on the Eastern, Middle and Western States, 39 miles to the inch.

Graham, J. D. Message of the Governor of Maryland transmitting reports of the Joint Commissioners and of Lt. Col. Graham, U. S. Eng., in relation to the intersection of the boundary lines of the States of Md., Pa., and Del. Washington, 1850. 8vo. 87 pp.

(Little map on the scale 1/15,840, showing location of "tg point.")

Higgins, Jas. Report of James Higgins, M. D., State Agricultural Chemist, to the House of Delegates. 8vo. 92 pp. Annapolis, 1850.

Md. House of Delegates, Dec. Sess. [G].

Deals principally with Eastern Shore, and includes several analyses, especially of marl.

1851.

Anon. Field notes of the Surveyors employed to run the Transpeninsular Line in 1751. 40 pp. 8vo.

Gilmor Md. Papers, vol. ii, Div. 3, No. 1. Md. Hist. Soc. Misc. Pub.

Bailey, J. W. Miscellaneous Notices. 3 Fossil Infusoria of Maryland.

Amer. Jour. Sci., 2nd ser., vol. xi, 1851. pp. 85-86.

Johnson, W. R. A Comparison of Experiments on American and Foreign Building stones to determine their relative strength and durability.

Amer. Jour. Sci., 2nd ser., vol. xi, 1851, pp. 1-17.

Gives pressure tests, analyses and the geological occurrence of the Cockeysville and Texas marbles and "alum" stones.

——— Some observations on the Gold Formations of Maryland, Virginia and North Carolina.

Proc. Amer. Assoc. Adv. Sci., vol. iv, 1851, pp. 20-22.

Gives the general trend of the formation near Rockville and Brookville, Md. W. B. Rogers, in the discussion which follows, describes the geological position of the auriferous belt and calls attention to the difference in character of the ore near the surface and that found at a depth.

1852.

Desor, E. Post Pliocene of the Southern States and its relation to the Laurentian of the North and the Deposits of the Valley of the Mississippi.

Amer. Jour. Sci., 2nd ser., vol. xiv, 1852, pp. 49-59.

Pages 50-51 deal more directly with Maryland.

Faber, Wm. L. On Carrollite, a new Cobalt Mineral.

Amer. Jour. Sci., 2nd ser., vol. xiii, 1852, pp. 418-419.

Gives the geological occurrence, the physical properties and chemical behavior of a cobalt linnaeite from Finksburg, Carroll Co., Maryland, which he calls Carrollite.

Fisher, R. S. Gazetteer of the State of Maryland compiled from the returns of the Seventh Census of the United States. New York and Baltimore, 1852, 8vo, 122 pp.

Pages 7-11 give a succinct statement of the geology of the State.

Higgins, James. The Second Report of James Higgins, M. D., State Agricultural Chemist, to the House of Delegates of Maryland. 8vo. 118 pp. Annapolis, 1852.

Md. House of Delegates, Jan. Sess., 1852 [C], 8vo, 126 pp.

Devoted to the geology and the soils of the Third District (Southern Maryland), giving several analyses of soils of that area.

Johnson, Alexander S. Notice of some undescribed Infusorial Shells.

Amer. Jour. Sci., 2nd ser., vol. xiii, 1852, p. 33.

Several new species from Piscataway are briefly described, including Asterodiscus nonarius, Asterolampra septenaria.

Locke, John. Observations on Terrestrial Magnetism.

Smithsonian Contrib. to Knowledge, vol. iii, 1st art., 30 pp. Washington, 1852.

Quotes observations at Baltimore and gives values for Finley's Station, Md.

1853.

Anon. Prospectus of the Springfield Copper Mine, Carroll County, Maryland. 8vo. Baltimore, 1853.

Contains brief reports by Diffenbach and Chas. T. Jackson.

——— Prospectus of the Dolly-Hide Copper Mine in Frederick County, Maryland. Baltimore. 12 pp. 1853.

Contains brief reports by Chas. T. Jackson, Tyson and Diffenbach.

CONRAD, T. A. Descriptions of New Fossil shells of the United States.

Jour. Acad. Nat. Sci. Phila., 2nd ser., vol. ii, 1853, pp. 273-276.

A few fossils from Chesapeake and Delaware Canal cited.

——— Monograph on the genus Fulgur.

Proc. Acad. Nat. Sci. Phila., vol. vi, 1853, pp. 316-319.

Describes a number of species from Maryland (St. Mary's).

HIGGINS, JAMES. The Third Report of James Higgins, M. D., State Agricultural Chemist, to the House of Delegates of Maryland. 8vo. 160 pp. Baltimore, 1853.

Md. House of Delegates, Jan. Sess., 1853, 8vo, 160 pp.

A treatise on manures, with a few analyses of soils and limestones, especially from Washington County.

MARCOU, JULES. A Geological Map of the United States and the British Provinces of North America, with an explanatory text, [etc.] 8vo, Boston, 1853.

Represents no Cretaceous on Western Shore, most of the Eastern Shore as alluvium, and the rest of the State covered successively by bands of Metamorphic, New Red, Metamorphic, Silurian and Devonian. No Carboniferous is represented within the limits of the State (?).

SMITH, J. LAWRENCE. Re-examination of American Minerals. Part III.

Amer. Jour. Sci., 2nd ser., vol. xvi, 1853, pp. 365-368.

Gives several new analyses of the original material from Finksburg and shows the natural isomorphism of cobalt and copper (p. 366).

1854.

ANON. First Annual Report of the President and Directors to the Stockholders of the Metropolitan Railroad Company. 8vo. 43 pp. 1854.

Folded map of the Metropolitan Railroad, showing the connecting lines leading from the seat of Government to the Western States.

EMMONS, EBENEZER. Geology of Gold-bearing slates in Montgomery county, Maryland.

Proc. Amer. Phil. Soc., vol. v, 1854, p. 85.

Extract from a letter on the geology of the locality, with references to the presence of gold.

HIGGINS, JAMES. The Fourth Annual Report of James Higgins, M. D., State Agricultural Chemist, to the House of Delegates of the State of Maryland. 8vo. 92 pp. Baltimore, 1854.

Also Md. House of Delegates, Jan. Sess., 1853.

Contains a paper on the relations between soils and crops, giving many analyses; also a paper on Allegany county.

Whitney, J. D. The Metallic Wealth of the United States. 8vo. 510 pp., illustrated. Lippincott. Phila. 1854.

Refers to Maryland gold (p. 124), copper (pp. 17-19), and iron (p. 472).

1855.

Anon. Second Annual Report of the President and Directors of the Metropolitan Railroad Company, to which are appended the Charter, By-Laws, etc. 8vo. 64 pp. 1855.

Map of the located route of the Metropolitan Railroad Company and the adjacent country, comprising District of Columbia and the counties of Montgomery, Frederick and Washington in the state of Maryland.

Dieffenbach, Otto. Das Vorkommen von Chrom-Erzen und ihre Verarbeitung in den Vereinigten Staaten von Nord Amerika.

N. J. B., vol. ii, 1855, pp. 533-539.

Describes the occurrence of the ore, the mode of working, and an analysis from Bare Hills, Maryland.

Haldeman, S. S. See Taylor, 1848.

Marcou, J. Resumé explicatif d'un carte géologique des États-Unis et des provinces anglaises de l'Amérique.

Bull. Soc. Géol. Fr., 2 ser., tome xii, 1855, pp. 813-936; colored geological map.

Explanation of map itself, so far as related to Maryland, apparently based on Maclure.

——— Ueber die Geologie der Vereinigten Staaten und der englischen Provinse von Nord Amerika.

Petermann's Mitth., 1855, pp. 149-159.

Allows no Cretaceous on the Western Shore.

——— On the Geology of the United States and British Provinces of North America.

Geology of North America, pp. 58-70. Translation of paper in Petermann's Mitth., vol. i, pp. 149-159.

Taylor, R. C.

See 1848.

1856.

Anon. The Charter and By-Laws of the Maryland Anthracite Coal Company of the Wyoming Coal Region, with Reports on the Geology and Mining Resources of their Coal Lands. Baltimore: John W. Woods, 1856. 8vo. 46 (1) pp. 2 maps.

Bailey, J. W. On the Origin of Greensand, and its formation in the oceans of the present epoch.

Amer. Jour. Sci., 2nd ser., vol. xxii, 1856, pp. 280-284.

Proc. Bost. Soc. Nat. Hist., vol. v, pp. 364-368.

Casts of Polythalamia in Eocene greensand from Mt. Washington, p. 364.

Ehrenberg, C. G. Zur Mikrogeologie. 2 vols. and atlas, roy. folio, forty-one plates. Leipzig, 1854-56.

Gives history of the determination of forms from Maryland, vol. ii, pp. 65-67.

The text on North America was published in 1856. One plate on Richmond and "Bermuda" forms.

Higgins, James. Fifth Agricultural Report of James Higgins, State Chemist, to the House of Delegates of the State of Maryland. 8vo. 91 pp. Annapolis, 1856 (published separately).

Also Md. House of Delegates, Jan. Sess., 1856.

Md. Sen. Doc.

Another edition, pp. 15-18 omitted, 8vo, 90 pp.

A study of manures and also of soils, with analyses of several soil samples from Frederick and Calvert counties.

Hitchcock, E. Outline of the Geology of the Globe and of the United States in particular, with geological maps, etc. 8vo. Boston, 1856 (3rd Edition).

In discussing the areal distribution of the different formations he frequently mentions Maryland, giving reasons for location of the lines on his maps.

——— Illustrations of Surface Geology.

Smithsonian Cont. Knowledge, vol. ix, 1856, 164 pp., twelve plates.

(Rev.) Amer. Jour. Sci., 2nd series, vol. xxiv, 1857, pp. 430-433. J. D. Dana.

Page 105 is a reference to the rocks at Great Falls on the Potomac and the gorge which has been cut below them.

Lesley, J. P. Manual of Coal and its Topography, or Geology of the Appalachian Region of the United States of America. Phila. Lippincott, 1856.

Incidental reference to Cumberland area, with an extended discussion of the general section and its characteristics.

Rogers, H. D. Geological Map of the United States and British North America.

Extract from "The Physical Atlas," by A. K. Johnson, 2d edition, fol. Edinburgh, 1856.

Rogers, W. B. Remarks on a series of Fossils from the Secondary belts of North Carolina, Virginia, Pennsylvania and Massachusetts.

Proc. Boston Soc. Nat. Hist., vol. v, 1856, pp. 14-18.

Discusses the Cypridae and regards rocks as Jurassic.

1857.

Ansted, D. T. On Some Remarkable Mineral Veins. 2. On some Copper lodes near Sykesville in Maryland.

Quart. Jour. Geol. Soc. London, vol. xiii, 1857, pp. 240-254.

Describes with sections the Springfield and Carroll mines, where the ore is first iron ore and then iron pyrites and lastly copper pyrites. Mentions deposit near Point of Rocks, which he believes to be the top of another copper pyrites body (pp. 242-245). Mine visited in 1854.

Genth, Frederick A. Contributions to Mineralogy.

Amer. Jour. Sci., 2nd ser., vol. xxiii, 1857, pp. 415-427.

Pages 418-419. Descriptions of Carrollite, from Patapsco and Springfield (Carroll County) mines and of Siegenite from Mineral Hill, Md., with analyses and physical properties.

Hall, James. Observations on the Cretaceous Strata of the United States with reference to the Relative Position of the Fossils collected by the Boundary Commission.

Amer. Jour. Sci., 2nd ser., vol. xxiv, 1857, pp. 72-86.

A comprehensive paper attempting a correlation of the Cretaceous of the Atlantic Coast, including New Jersey and Delaware, with that of the west and southwest. See also U. S. and Mexico Boundary Survey under Emory.

1858.

Dieffenbach, Otto. Bemerkungen über den Kupferbergbau in den Vereinigten Staaten von Nord-Amerika.

Berg- und Hütt. Zeit, 1858, pp. 47-48, 66-68, 75-76 (not seen).

Higgins, James. The Sixth Agricultural Report of James Higgins, State Chemist, to the House of Delegates of the State of Maryland. 8vo. 96 pp. Annapolis, 1858. With an appendix "On the Analysis of Soils" by Chas. Beckell. Order of House and Senate.

Md. Sen. Doc. [E]. Md. House Doc. [D].

Also State Chemist's Report, n. d. (1858), 8vo, 96, xxii pp.

Includes a very short account of the geology of Carroll County.

Marcou, J. Geology of North America. 4to. Zurich, 1858.

A collection and republication of several papers, maps and figures dealing with American Geology.

Rogers, H. D. The Geology of Pennsylvania. 2 vols. (vol. II in two parts) and maps. 4to. Phila. 1858.

This work contains frequent reference to the Maryland extension of formations studied in Pennsylvania, besides giving the typical sections, terms, fossils, etc.

1859.

Anon. The Western Maryland Railroad, its Agricultural and Mineral Resources . . . its future Importance to . . . Baltimore. Baltimore, 1859. 16mo. pp. (2), xii, 39 pp.

Gabb, W. M. Description of some new Species of Cretaceous Fossils.

Jour. Acad. Nat. Sci., Phila., 2nd ser., vol. iv, 1858-1860, pp. 299-305.

Refers to several fossils from Delaware and Chesapeake Canal, pp. 300, 302, 303.

Jackson, Chas. T. Maryland Marbles and Iron Ores.

Proc. Boston Soc. Nat. Hist., vol. vi, 1859, pp. 243-245.

Gives analyses and results of pressure tests on Cockeysville rock, also gives few facts on iron ore near Whitehall.

Johnston, Christopher. Notes on Odontology.

Amer. Jour. Dental Sci., Phila., n. s. vol. ix, No. 3, 1859, pp. 337-343.

Description of Astrodon (afterwards called Astrodon johnstoni) from Bladensburg.

Rogers, H. D. Classification of the Metamorphic Strata of the Atlantic Slope of the Middle and Southern States. (Read Feb. 18, 1857.)

Proc. Boston Soc. Nat. Hist., vol. vi, 1859, pp. 140-145.

Discusses the gneisses, semi-crystallines and Paleozoic rocks, mentioning the limits between the first two on the B. & O. R. R. and elsewhere in Maryland.

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Fordyce, W. A History of Coal, Coke, Coal Fields, [etc.] London: Sampson, Low, Son & Co., 1860.

Deals mostly with British coals, but refers to the state of trade in America in 1858.

Lee, Thos. J. Southern Boundary of Maryland.

Laid down in conformity with the agreement of Philip Calvert and Edmund Scarbrugh (1668). Map by John de la Camp. Annapolis, 1860.

Piggott, A. Snowden. Prospectus of the Mineral Hill Mine, Carroll County, Maryland. 8vo. 8 pp. Baltimore, 1860.

Brief report on mine by the author.

Tyson, P. T. First Report of Philip T. Tyson, State Agricultural Chemist, to the House of Delegates of Maryland, Jan. 1860. 8vo. 145 pp. Annapolis, 1860. Maps.

Md. Sen. Doc. [E]. Md. House Doc. [C].

Deals with the rocks and soils, fertilizers, etc., and explains the accompanying geological map.

——— Report of Chemist. n. d. (1860), 8vo, 4 pp.

1861.

Conrad, T. A. Fossils of the (Medial Tertiary or) Miocene Formation of the United States. No. 4. 1861(?). pp. 81-89, index and plates xlv-xlix.

(Repub.) by W. H. Dall, Washington, 1893.

Original descriptions of several Maryland forms.

Hall, James. Paleontology. Vol. III, Part I. Geological Survey N. Y., Albany, 1861. Containing Descriptions and figures of the Organic Remains of the Lower Helderberg group and the Oriskany Sandstone. 1855-1859.

Description and figures of numerous forms from Cumberland and vicinity.

Johnston, Christopher. Upon a Diatomaceous Earth from Nottingham, Calvert Co., Maryland.

Proc. Amer. Assoc. Adv. Sci., vol. xiv, 1860, pp. 159-161.

Shows that "Bermuda earth" must have come from this deposit or its southward prolongation. Corroborative letters by A. M. Edwards and Chas. Stodder.

Norman, George. On some Undescribed Species of Diatomaceae. (Read Nov. 14, 1860.)

Trans. Microscopical Soc. of London, n. s. vol. ix, 1861, pp. 5-9.

Describes and figures Aulacodiscus sollittianus (n. sp.) from Nottingham, Maryland. (p. 7.)

Rogers, W. B. Infusorial earth from the Tertiary of Virginia and Maryland. (Read May 4, 1859.)

Proc. Boston Soc. Nat. Hist., vol. vii, 1861, pp. 59-64.

Refers more particularly to Virginia localities, but considers them as types of Maryland exposures.

Tryon, Geo. W., Jr. List of American Writers on Recent Conchology. New York, 1861. 8vo. 68 pp.

The author gives a bibliography of the works of these writers, which includes many references to Maryland.

Tyson, P. T. [Letter from Mr. Tyson of Maryland on Tripoli.] (Read Dec. 1860.)

Proc. Acad. Nat. Sci., Phila., vol. xii, 1861, pp. 550-551.

Describes occurrences and distribution of "Tripoli," which he considers Miocene.

Wheatley, Charles M. Remarks on the Mesozoic Red Sandstone of the Atlantic Slope, and notice of the Discovery of a Bone Bed therein at Phoenixville, Penn.

Amer. Jour. Sci., 2nd ser., vol. xxxii, 1861, pp. 41-48.

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CONRAD, T. A. Catalogue of the Miocene Shells of the Atlantic Slope.

Proc. Acad. Nat. Sci. Phila., vol. xiv, 1862, pp. 559-582.

Gives reference to original descriptions, but no localities.

——— Description of New, Recent and Miocene Shells.

Proc. Acad. Nat. Sci. Phila., vol. xiv, 1862, pp. 583-586.

Describes a Busycon alveatum from St. Mary's river.

GENTH, F. A. Contributions to Mineralogy.

Amer. Jour. Sci., 2nd ser., vol. xxxiii, 1862, pp. 190-206.

Gives a paragraph on the non-occurrence of chrysolite in Md., pp. 201-202. Analysis of kerolite from Harford Co., pp. 203-204.

TYSON, PHILIP T. Second Report of Philip T. Tyson, State Agricultural Chemist, to the House of Delegates of Maryland, Jan. 1862. 8vo. 92 pp. Annapolis, 1862.

Md. Sen. Doc. [F].

Treats quite fully of the geology and industrial resources of Maryland.

1863.

BACHE, A. D. Records and results of a Magnetic Survey of Pennsylvania and parts of adjacent states in 1834, '35, '41, '43, '62.

Smithsonian Contrib. Knowledge, vol. xvii, 1863, 88 pp.

Had stations at Baltimore, Frostburg and Frenchtown.

1864.

BACHE, A. D. Abstract of results of a Magnetic Survey of Pennsylvania and parts of adjacent States in 1840 and 1841, with some additional results of 1843 and 1862.

Rep't Supt. Coast and Geodetic Survey, 1862, Washington, 1864, appendix 19, pp. 212-229.

See Schott, C. A., 1896.

CONRAD, T. A. Notes on Shells, with description of new fossil Genera and Species.

Proc. Acad. Nat. Sci. Phila., vol. xvi, 1864, pp. 211-21[illegible].

See p. 213 for description of Dosiniopsis meekii found six miles east of Washington, D. C.

PAYNTER, THOS., and GAUSSOIN, EUG. Prospectus of the Bare Hill Copper Mining Company. Baltimore. 15 pp. 1864.

Contains short reports on the property by Thos. Paynter and Eug. Gaussoin.

1865.

Anon. Report of the Select Committee appointed to prepare a statement in Relation to the Resources of Maryland. Annapolis, 1865. 8vo. 52 pp.

Md. House Jour. and Doc., 1865 [EE].

Conrad, T. A. Catalogue of the Eocene and Oligocene Testacea of the United States.

Amer. Jour. Conch., vol. i, 1865, pp. 1-35.

A list of forms from the Middle Atlantic Slope. See also corrections in Amer. Jour. Conch., vol. i, 1865, p. 191.

——— Observations on the Eocene Lignite Formation of the United States.

Proc. Acad. Nat. Sci. Phila., vol. xvii, 1865, pp. 70-73.

(Abst.) Amer. Jour. Sci., 2nd ser., vol. xl, 1865, pp. 265-268.

Brief description of the Cape Sable beds based on Durand.

——— Descriptions of new Eocene shells and references with figures to published series.

Amer. Jour. Conch., vol. i, 1865, pp. 210-212, plates 20 and 21.

Describes Lunatia marylandica, but gives no locality.

Leidy, Joseph. Cretaceous Reptiles of the United States.

Smithsonian Contrib. Knowledge, No. 192, vol. xiv, 1865, 135 pp. and twenty plates.

Description and figures of a tooth of Astrodon johnstoni from Bladensburg, Md.

1866.

Anon. Description of the Property of the Maryland Marble Company of Baltimore. Baltimore: Cushing & Medairy, 1866. 16mo. 15 pp.

Anon. Mining Summary.

Amer. Jour. Mining, vol. ii, 1866, p. 21.

Notes on Montgomery gold mines copied from Rockville Sentinel.

Anon. Report of Select Committee on the Resources of the State. Annapolis, 1866. 8vo. 2 pp.

Md. House Jour. and Doc., 1866 [O].

Cole, Wm. R. Report of William R. Cole, Esq., Chief Clerk of House of Delegates, in Relation to the Distribution of the Report of the Select Committee on the Resources of Maryland. Annapolis, 1866, 8vo, 16 pp.

Md. House Jour. and Doc., 1866 [C].

CONRAD, T. A. Check List of the Invertebrate Fossils of North America (Eocene and Pleiocene).

Smithsonian Misc. Col., vol. vii, Art. C, 1866, 46 pp.

Includes Eocene from Middle Atlantic Slope.

——— Illustrations of Miocene Fossils, with Descriptions of New Species.

Amer. Jour. Conch., vol. ii, 1866, pp. 65-74, plates 3 and 4.

Describes and figures several new forms from St. Mary's and Calvert Cliffs.

DADDOW, S. H., and BANNON, BENJ. Coal, Iron and Oil; or the Practical American Miner. 8vo. 808 pp. Maps, sections, illustrations. B. Bannon, Pottsville, Pa., 1866.

Written in a popular style from an economic standpoint, this book contains discussions of the formation of the Appalachians and of the coal, the history of the use of coal, and the distribution of the known coal fields. The more detailed discussion of Maryland (pp. 317-338) contains map of Frostburg coal field about 4 miles to inch and sections.

DUNLOP, JAMES. A Memoir on The Controversy between William Penn and Lord Baltimore, respecting the Boundaries of Pennsylvania and Maryland, by James Dunlop, Esq. Read at a meeting of the Council, Nov. 10, 1865.

Memoirs Hist. Soc. Penn., vol. i, 1866, pp. 165-204.

PARRISH, R. D. A Statistical and Geological Report upon the Slate trade of the United States.

Amer. Jour. Mining, vol. ii, 1866-7, pp. 233, 250, 278.

Gives general remarks on history, etc., stating that a quarry was opened near Frederick about 1812.

1867.

CONRAD, T. A. Descriptions of New Genera and Species of Miocene shells, with notes on other fossil and recent species.

Amer. Jour. Conch., vol. iii, 1867, pp. 257-270.

Describes and figures several new forms from Calvert Cliffs and Charles Co.

COPE, E. D. An addition to the Vertebrate Fauna of the Miocene Period, with a Synopsis of the Extinct Cetacea of the United States.

Proc. Acad. Nat. Sci. Phila., vol. xix, 1867, pp. 138-156.

The forms described come from Charles Co., not far from the Patuxent and include several new forms and many previously described species.

HALL, JAS. Paleontology, Vol. IV, Part I. Containing Descriptions and Figures of the Fossil Brachiopoda of the Upper Helderberg, Hamilton and Chemung Groups, 1862-1866. Geological Survey of N. Y. Albany, 1867. 4to. 427 pp. 63 plates.

Description and figures of numerous forms from Cumberland and vicinity.

HIGGINS, JAMES. A Succinct Exposition of the Industrial Resources and Agricultural advantages of the State of Maryland.

Md. House of Delegates, Jan. Sess., 1867 [DD], 8vo, 109, iii pp.

Md. Sen. Doc., Jan. Sess., 1867 [U].

1868.

ANON. Mining Summary for Maryland.

Amer. Jour. Mining, vol. vi, New York, 1868, p. 53.

Quotes the Frederick City Union regarding the discovery of gold in the Blue Ridge Mountains near Frederick. (5 lines.)

COPE, E. D. (On the discovery of the fresh-water origin of certain deposits of sand and clays in west New Jersey.)

Proc. Acad. Nat. Sci. Phila., vol. xx, 1868, pp. 157-158.

"The whole formation indicates the existence of an extended body of fresh water, having a direction and outline similar to that which deposited the red sandstones and shales of the Triassic belt, which extends parallel to its northwest margin."

——— Second Contribution to the History of the Vertebrata of the Miocene Period of the U. S.

Proc. Acad. Nat. Sci. Phila., vol. xx, 1868, pp. 184-194.

Written after a visit to the Charles Co. locality, and includes the description of several new species.

——— [Remarks on extinct Reptiles.]

Proc. Acad. Nat. Sci. Phila., vol. xx, 1868, p. 313.

Describes a fossil of the genus Thecachampsa from the Miocene of Maryland.

JONES, ISAAC D. Report of the Commissioners appointed by the Legislatures of Maryland and Virginia to run and mark the Division Line between Maryland and Virginia on the Eastern Shore of Chesapeake Bay. Annapolis, 1868. 36 pp.

A paper referring to many of the old charters, charts and state papers with reference to the boundaries.

1869.

ANON. Cumberland Bituminous Coal.

Eng. & Min. Jour., vol. viii, 1869, p. 153.

Comparison of Cumberland and Nova Scotia coals in relation to tariff question.

COPE, E. D. The Fossil Reptiles of New Jersey.

Amer. Nat., vol. iii, Salem, 1870, 84-91.

Refers to the occurrence of the genus Thecachampsa in the Miocene of Southern Maryland (p. 91) as found by Mr. Tyson.

HODGE, JAS. T. Report of the Coal Properties of the Cumberland Coal Basin in Maryland, from surveys and examinations made during the summer of 1868. New York, 1869. 65 pp.

Discusses coal region, property lines, coal bed, drainage and access, system of mining, and product to the area. One of the most valuable papers yet published on the subject.

LEIDY, J. The Extinct Mammalian Fauna of Dakota and Nebrasqa, including an account of some allied forms from other localities, [etc.]

Jour. Acad. Nat. Sci., Phila., n. s. vol. vii, 1869, pp. 255-256.

Describes elephants' teeth from Talbot Co.

LOGAN, WM. E. Geological map of Canada and the Northern United States.

(Rev.) Amer. Jour. Sci., 2nd ser., vol. xlix, 1870, pp. 394-398.

Bears date of 1866, but was not published until 1869.

1870.

ANON. Report of the Joint Standing Committee on Jones Falls to the First Branch of the City Council of Baltimore (etc.) Baltimore, 1870. 178 pp.

CARRUTHERS, WM. On Fossil Cycadean Stems from the Secondary Rocks of Britain. (Read 1868.)

Trans. Linn. Soc., vol. xxvi, 1870, p. 708.

In a postscript to the above memoir the author mentions a photograph of specimen discovered by Tyson in 1859 in Marylaud.

GARRETT, J. W. Proceedings of Railway Meetings held in relation to the Baltimore and Ohio and its Extensions, Branches and Connections, at Pittsburg, Uniontown, Chicago, Louisville, and elsewhere and the Remarks of John W. Garrett, President, at those points. 8vo. 31 pp. 1870.

Folded map of the B. & O. and its connections.

ROESSLER, A. R. Mining Summary. Maryland.

Eng. and Min. Jour., vol. ix, New York, 1870, p. 37.

Describes the occurrence of gold and the mineral resources of Montgomery county.

1871.

CREDNER, HERMANN. Die Geognosie und der Mineralreichtum des Alleghany Systems.

Petermann's Mitth., vol. xvii, pp. 41-50.

General discussion of economic resources. Map.

HARDEN, J. W. The Brown Hematite Ore Deposits of South Mountain. (Read August, 1871.)

Trans. Amer. Inst. Min. Eng., vol. i, 1871, pp. 136-144.

Eng. and Min. Jour., vol. xii, pp. 386-387, and vol. xiii, 1871-72, p. 10, 1873, pp. 136-144.

Economic account of the Clinton ores occurring in the portion of South Mountain adjacent to Maryland.

HUNT, T. S. Geognosy of the Appalachians and the Origin of Crystalline Rocks.

Amer. Nat., vol. v, 1871, pp. 451-509.

Proc. Amer. Assoc. Adv. Sci., vol. xx, 1871, pp. 135-159.

(Abst.) Amer. Jour. Sci., 3rd ser., vol. ii, 1871, pp. 205-207.

Discussion of the crystalline rocks of the Appalachian belt. General references to Maryland.

SHALER, N. S. On the Causes which have led to the Production of Cape Hatteras.

Proc. Boston Soc. Nat. Hist., vol. xiv, 1871, pp. 110-121.

Many of the conditions are related as to the state of the Chesapeake and of Maryland in late geologic time.

——— Some Physical Features of the Appalachian System and the Atlantic Coast of the U. S., especially near Cape Hatteras. (Read Feb. 1, 1871.)

Amer. Nat., vol. v, 1871, pp. 178-183.

The origin of Delaware and Chesapeake Bays attributed to erosion by glacial ice streams.

TYSON, P. T. Section of Cumberland Coal Basin.

Proc. Amer. Phil. Soc., vol. ix, 1871, pp. 9-13.

Gives a section from gray limestone of xi (Dug Hill near Lonaconing) of 2050 feet or from Devonian to 2000 feet above "Main Coal Seam."

1872.

AYDELOTT, W. J. Report of Eastern shore boundary between Maryland and Virginia.

Md. Senate Jour., Sen. and House Doc., 1872 [G], 11 pp.

Gives account of running the lines, etc.

HITCHCOCK, C. H. Description of the Geological Map.

Ninth Census, vol. iii, Washington, 1872, pp. 754-756.

Gives authorities (Tyson for Maryland) and some statistics on the area.

HUNT, T. STERRY. Presidential Address. The Geognosy of the Appalachian System.

Proc. Amer. Assoc. Adv. Sci., vol. xx, 1872, pp. 1-35.

This is a general paper dealing more particularly with New York and New England, with only incidental remarks on Maryland.

McDonald, A. Extract from the report of Col. A. McDonald in March, 1861, to the Governor of Virginia, of the results of his mission to England to obtain maps and documents relating to the boundary between Virginia and Maryland. 13 pp.

Md. Senate Jour., Senate and House Doc., 1872, W.

This is a general paper, dealing more particularly with New York and New England, giving only incidental remarks on Maryland.

Schott, Chas. A. Tables and Results of the precipitation in Rain and Snow in the United States.

Smithsonian Contrib. Knowledge, vol. xviii, 1872, pp. 1-173. (See Md. in Index, p. 163.)

2nd Edit. Smithsonian Contrib. Knowledge, vol. xxiv, 1881, pp. 1-249.

Stephens, Thomas. Mining Summary. Maryland.

Eng. and Min. Jour., vol. xiv, 1872, p. 411.

Notes on the fire-brick clays at Mt. Savage and upon the Frostburg coal mines.

1873.

Anon. [Geology of Maryland.]

New Topographic Atlas of Maryland by Martenet, Walling and Gray. Baltimore, 1873, pp. 12-16.

Blodget, L. The Climate of Maryland.

In A New Topographic Atlas of Maryland by Martenet, Walling and Gray, Baltimore, 1873, p. 19 (with map).

Gibbes, George. The "Glades" of Maryland.

Amer. Nat., vol. vii, 1873, p. 636.

Short note suggesting that the valleys near Oakland are due to glacial action.

Hitchcock, C. H. The Coal Area of the United States of America.

Geol. Mag., vol. x, 1873, pp. 99-101.

Gives the coal area of Maryland as 550 square miles (based on Tyson).

Macfarlane, James. The Coal Regions of America, their Topography, Geology, and Development. New York, 1873.

Wise, Henry A., Dejarnette, D. C., and Watts, Wm. Report and accompanying documents of the Virginia Commissioners appointed to ascertain the Boundary Line between Maryland and Virginia. Richmond, 1873. 146 pp. Appendix 314 pp.

Refers to old authors and contains many depositions. Accompanied by fac-similes of old maps.

1874.

Anon. Final Reports of the Virginia Commissioners on the Maryland and Virginia Boundary to the Governor of Virginia. Richmond, 1874.

Dunlap, Thos. (Editor). Wiley's American Iron Trade Manual. New York, 1874.

A Directory giving furnaces and ores used, also a description of the iron ores of Maryland, p. 460.

Hagen, H. A. On Amber in North America.

Proc. Boston Soc. Nat. Hist., vol. xvi, 1874, pp. 296-301.

Discusses Troost's paper (1821) on the Cape Sable locality and compares the various sources of amber.

Hall, Jas. The Niagara and Lower Helderberg Groups: their relations and geographical distribution in the United States.

Proc. Amer. Assoc. Adv. Sci., vol. xxiii, 1874, pp. 321-335.

27th Rept. N. Y. State Museum, Albany, 1874, pp. 117-131.

Brief remarks on Cumberland area. The map to accompany this paper was not published till the next year in the 28th Ann. Rept.

Jones, I. D. Report and Journal of Proceedings of the Joint Commissioners to Adjust the Boundary Line of the States of Maryland and Virginia. Annapolis, 1874.

Md. House Doc. 1874 J; Senate Doc. E.

Gives many facts on old maps, charts and state lines.

Latrobe, H. B.

(See Merrill, Wm. E.)

Lesley, J. P.

(See Merrill, Wm. E.)

Merrill, Wm. E. Extension of the Chesapeake and Ohio Canal to the Ohio River. Including reports by J. S. Sedgwick, Totten, Poussin, Lesley and Latrobe.

House Doc. No. 208, 43rd Cong., 1st Sess., 59 pp.

Discussion of country between Cumberland, Md., and Pittsburgh, Pa.

Sedgwick, J. S. Report of Instrumental reconnaissance and examination for the Extension of the Chesapeake and Ohio Canal.

(See Merrill, Wm. E.)

1875.

ANON. The Maryland Coal Company's Cumberland Coal.

Eng. and Min. Jour., vol. xix, 1875, p. 1.

Partial table of production from 1842 to 1874. Approximate area of field is given.

FONTAINE, WM. M. On some Points in the Geology of the Blue Ridge in Virginia.

Amer. Jour. Sci., 3rd ser., vol. ix, 1875, pp. 14-22, 93-101.

(Abst.) Geol. Record, 1875, London, 1877, p. 119.

Includes a few notes on Catoctin Mt., and the argillites of Point of Rocks and Harper's Ferry, pp. 15-17. The first paper deals with some of the general problems involved in a study of the Blue Ridge, and the illustrations are mostly taken from that portion of the range, near the Potomac river. The second paper deals with the area about Lynchburg and southward.

——— On the Primordial Strata of Virginia.

Amer. Jour. Sci., 3rd ser., vol. ix, 1875, pp. 361-369, 416-428, 3 figures.

(Abst.) Geol. Record, 1875, London, 1877, p. 119.

Refers briefly to the geology of Harper's Ferry (p. 362) and to the folds at "Cement Mill" near Hancock (p. 364). Geology of the Harper's Ferry region, pp. 422-423.

GENTH, F. A. Geological Report of the Maryland "Verde Antique" Marble and Other Minerals on the Lands of the Havre Iron Co., in Harford County, Maryland. Univ. of Penn., 1875, 9 pp.

Description including sketch map of property.

GILLMORE, Q. A. Report on the Compression Strength, Specific Gravity, and ratio of Absorption of the Building stones in the United States.

Rept. Chief of Engineers U. S. Army, part ii, appendix II, pp. 819-851.

Same separately, 8vo, 37 pp., New York, Van Nostrand, 1876.

JOHNSTON, CHRISTOPHER. About the rediscovery of the "Bermuda Tripoli" near Nottingham, on the Patuxent, Prince George's County, Md.

Proc. Boston Soc. Nat. Hist., vol. xvii, 1875, pp. 127-129.

Short account of forms found and the correlation of the old "Bermuda earth" with the newly found locality.

MACFARLANE, JAMES. The Coal Regions of America. 8vo. 3rd edit. 1875. (1st 1873.)

The author gives a compilation of the available data on the Cumberland coal area, pp. 237-261.

PRIME, F., JR. On the Occurrence of the Brown Hematite Deposits of the Great Valley.

Trans. Amer. Inst. Min. Eng., vol. iii, 1875, pp. 410-422.

Eng. and Min. Jour., vol. xx, 1875, pp. 285-298.

Relations and origin of the iron ores in the so-called damourite slates associated with the Auroral limestones of Pennsylvania. Conclusions equally applicable to Maryland and Virginia. "Brown hematites were probably formed by the oxidation of iron pyrites, but the former are not in the same place that the latter were" (p. 415). Discussion by T. Sterry Hunt (pp. 417-421) and Persifor Frazer (pp. 421-422). The latter agrees in general with the author, but takes exception to his view that the ore is "from pyrite disseminated in the overlying limestones."

SULLIVANT, J. [Letter to Professor Christopher Johnston on Bermuda Tripoli in Maryland.]

Proc. Boston Soc. Nat. Hist., vol. xvii, 1875, pp. 422-423.

TONER, JOSEPH M. Contributions to the Medical History and Physical Geography of Maryland.

Trans. Med. and Chirurgical Faculty of Md., Baltimore, 1875.

Associates vital statistics with topography and gives thirteen topographic sections of different parts of the state.

1876.

FONTAINE, WM. M. The Conglomerate Series of West Virginia.

Amer. Jour. Sci., 3rd ser., vol. xi, 1876, pp. 276-284, 374-384.

In a foot-note there is a reference to Mr. Tyson's section of the Cumberland Basin, with inferences therefrom, p. 375.

FRAZER, PERSIFOR, JR. Origin of the Lower Silurian limonites of York and Adams Counties. (Read Mar. 19, 1875.)

Proc. Amer. Phil. Soc., vol. xiv, 1876, pp. 364-369.

Believes the limonite originated from pyrite, the action possibly being aided by the pressure of limestones.

HACHEWELDER, JOHN (W. C. Reichil, editor). Names which the Lenni Lennapi or Delaware Indians gave to Rivers, Streams and Localities within the states of Penn., New Jersey, Maryland and Virginia, with their signification. Nazareth, 1872.

Trans. Moravian Hist. Soc., vol. i, Nazareth, 1876, pp. 225-282.

Originally published 1834, Trans. Amer. Phil. Soc. (title spelled differently).

Gives the derivation and signification of some 25 local names, especially those of rivers.

HUNT, T. STERRY. Geology of Eastern Pennsylvania.

Proc. Amer. Assoc. Adv. Sci., vol. xxv, 1876, pp. 208-212.

Considers the Blue Ridge in Maryland to be Montalban and Huronian with no Laurentian.

1877.

ANON. Assessed Valuation of Coal and Mining Corporations in Allegany County, Maryland.

Eng. and Min. Jour., vol. xxiii, 1877, pp. 242.

Valuation of Maryland coal companies for 1866 and 1876 taken from the Cumberland Alleghanian of April 3, 1877.

FRAZER, PERSIFOR, JR. The Position of the American New Red Sandstone.

Trans. Amer. Inst. Min. Eng., vol. v, 1877, pp. 494-501.

See also Polytechnic Review, vol. iii, 1877, p. 170.

A general paper correlating the red sandstones of the middle Atlantic Slope with those of Germany and England.

LEWIS, H. C. On the Optical Characters of some Micas.

Printed from Proc. Min. and Geol. Sect. Acad. Nat. Sci., Phila., Oct. 22, 1877.

Gives the optic angle of talc from Harford county (15°) and refers to Cecil county Vermiculites.

PLATT, F. & W. G. Report of Progress in the Cambria and Somerset District of the Bituminous Coal-Fields of Western Penn.

Rept. Second Geol. Survey Pa., HHH, 1877, 348 pp., plates and maps.

Deals with the geological formations along the border of the state and their extension into Maryland.

ROGERS, WM. B. On the Gravel and Cobble stone Deposits of Virginia and the Middle States. (Read May 19, 1875.)

Proc. Boston Soc. Nat. Hist., vol. xviii, 1877, pp. 101-106.

Description of the formation, which the author correlates with the Purbeck beds of England.

SCHOOT, CHAS. A. Tables, Distribution, and variations of the Atmospheric Temperature in the United States.

Smithsonian Contrib. Knowledge, vol. xxi, 1876, 360 pp., nine diagrams, two plates, three charts.

Had several stations in Maryland, with varying length of record.

1878.

ANON. Papers relating to the Boundary Dispute between Pennsylvania and Maryland.

Pennsylvania Archives, 2nd ser., vol. iii, Harrisburg, 1878, pp. 300-400.

HUNT, T. STERRY. Special Report on the Trap Dykes and Azoic Rocks of Southeastern Pennsylvania.

Rept. Second Geol. Survey Pa., E, 1878, p. 253.

An historical paper on the Pre-Silurian rocks discussing the theories which had been proposed and suggesting various modifications.

JONES, I. D. Report upon the boundary line award between Maryland and Virginia. 1878. 8 pp.

Md. House and Senate Doc., 1878 [N].

Lesley, J. P. [On Orthoceras from Frazer Point on the Susquehanna.]

Proc. Amer. Phil. Soc., vol. xvii, 1878, p. 312.

Lowdermilk, Will H. History of Cumberland, [etc.] with maps and illustrations, by Will H. Lowdermilk. 8°. Washington, D. C., 1878.

Russell, I. C. The Physical History of the Triassic Formation of New Jersey and the Connecticut Valley.

Annals N. Y. Acad. Sci., vol. i, No. 8, 1878, pp. 220-254.

(Review) Amer. Jour. Sci., 3rd ser., vol. xvii, pp. 328-330, J. D. Dana.

The author concludes that "the detached areas of Triassic rocks occurring along the Atlantic border from New England to North Carolina seem fragments of one great estuary formation now broken up and separated through the agency of upheaval and denudation."

Stevenson, John J. On the Surface Geology of Southwest Pennsylvania, and adjoining portions of Maryland and West Virginia.

Amer. Jour. Sci., 3rd ser., vol. xv, 1878, pp. 245-250.

He distinguished twenty horizontal benches and river terraces ranging in elevation from 580-1100 feet above the sea, which he regards as "sea beaches marking stages of the withdrawal of the ocean." No specific localities are given in Maryland.

——— The Upper Devonian Rocks of Southwest Pennsylvania.

Amer. Jour. Sci., 3rd ser., vol. xv, 1878, pp. 423-430.

Includes brief reference to the Devonian of the Alleghany and Negro mountains in Maryland, pp. 425-426.

1879.

Anon. Review of the Coal Trade of 1878.

Eng. and Min. Jour., vol. xxvii, 1879, pp. 1-10.

Output of the Cumberland coal fields for 1876, '77, '78.

Blandy, J. F. The Lake Superior Copper rocks in Pennsylvania.

Trans. Amer. Inst. Min. Eng., vol. vii, 1879, pp. 331-339.

A correlation based on two days' work, which is sharply criticised by T. Sterry Hunt, who regards the rocks as Huronian and not Keweenian, and by Persifor Frazer, who claimed that the "porphyry shows no character of igneous action."

Cain, Peter. Second Annual Report of Peter Cain, Inspector of Mines. Annapolis, 1878. 8vo. 16 pp.

Gives workings and conditions of the mines for the year.

Fontaine, W. M. Notes on the Mesozoic of Virginia.

Amer. Jour. Sci., 3rd ser., vol. xvii, 1879, pp. 25-39, 151-157, 229-239.

Distinguishes seven different belts, two or three of which extend across Maryland, dipping usually to the southeast. Considers the "Potomac marble" boulders to have

come from the northwest, from Maryland and Pennsylvania, sometimes a distance of 40 miles, with the boulders increasing in coarseness to the southward. Reference to the "iron ore clays" of Maryland, pp. 155-157. The papers also include numerous observations on the overlying gravels, with a correlation.

FRAZER, PERSIFOR, JR. Classification of Coals. (Read May, 1877.)

Trans. Amer. Inst. Min. Eng., vol. vi, 1879, pp. 430-451.

The ratios of volatile to fixed combustible matter is given for several Cumberland coals (after W. R. Johnson).

——— [The Lake Superior Copper Rocks in Pennsylvania.]

Trans. Amer. Inst. Min. Eng., vol. vii, 1879, pp. 336-339.

Quotes from Report CC (Second Geological Survey of Pennsylvania) and other articles. Holds that South Mountain is separate from Primal of Rogers and that the rocks found there are not igneous.

——— The Mesozoic Sandstone of the Atlantic Slope.

Amer. Nat., vol. xiii, 1879, pp. 284-292.

Review of three papers—Heinrich, Mesozoic formations of Va., Trans. Amer. Inst. Min. Eng., 1878; Fontaine, Notes on Mesozoic of Va., Amer. Jour. Sci., 1879; Russell, On the Physical History of the Triassic, Annals N. Y. Acad. Sci., 1878.

FRAZER, PERSIFOR, JR. Fossil (?) Forms in the Quartzose Rocks of the Lower Susquehanna, with plate. (Read Apr. 4, 1879.)

Proc. Amer. Phil. Soc., vol. xviii, 1880, pp. 277-279.

Deals with some curious indeterminate forms from Frazer's Point, Cecil county. Letters by Whitfield and Hall.

HEINRICH, OSWALD J. The Mesozoic formation in Virginia. (Read Feb. 1878.)

Trans. Amer. Inst. Min. Eng., vol. vi, 1879, pp. 227-274.

The author recognizes four divisions very nearly parallel running from S. 30° to W. 37°, which are described. Distinguishes conglomerates, sandstones, slates, shales, limestones and coal. Apparently considers that the formation extended to New Market, Westminster and Strassburg (p. 250). Maps and sections.

HUNT, T. STERRY. (On the Geology of the Eozoic Rocks of North America.)

Proc. Boston Soc. Nat. Hist., vol. xix, 1879, pp. 275-279.

MCCREATH, ANDREW A. Second Report of Progress in the Laboratory of the Survey at Harrisburg.

Rept. 2nd Geol. Surv. Pa. MM, Harrisburg, 1879.

Contains analyses of Maryland materials, pp. 29, 266, 269.

PRIME, FREDERICK. A Catalogue of Official Reports upon Geological Surveys of the United States and Territories and of British North America.

Trans. Amer. Inst. Min. Eng., vol. vii, 1879, pp. 455-525.

A partial list of publications relating to Maryland, corrected in 1881, which see.

Russell, I. C. On the Physical History of the Triassic Formation in New Jersey and Connecticut Valley.

Annals N. Y. Acad. Sci., vol. i, 1879, p. 79, also pp. 220-254.

Several references to particular Triassic areas in Maryland.

Scharf, J. T. History of Maryland from the Earliest Period to the Present Day. 3 vols., 4to, Baltimore, 1879.

Contains many references to the early maps, histories and industries of the state.

1880.

Brown, Thomas. The Maryland Union Coal Company.

Eng. and Min. Jour., vol. xxx, 1880, p. 3.

Several facts on the size, character and extent of the coal veins in the property of the company.

Dana, J. D. Manual of Geology. 3rd edit.

Maryland, pp. 236, 243, 419, 455, 490, 494-5.

Frazer, Persifor, Jr. The Geology of Lancaster County, Pa.

Rept. 2nd Geol. Surv. Pa. CCC, Harrisburg, 1880, atlas.

Deals with the geological formations along the border of the state and their extension into Maryland.

Jeffries, W. W. Menaccanite and Talc from Maryland.

Proc. Acad. Nat. Sci., Phila., 1880, p. 292.

J. C. K. Maryland Mining Notes.

Eng. and Min. Jour., vol. xxix, 1880, p. 48.

Notes on iron and gold prospects from various parts of the state. Also reference, p. 306, to gold found near Mr. Appold's estate on land owned by Mr. F. M. Hay; assayed at $30 per ton.

Lesley, J. P. On a slab of roofing slate covered with casts of *Buthotrephis flexuosa* from the Peach Bottom Slate Quarries. (Read Dec. 1879.)

Proc. Amer. Phil. Soc., vol. xviii, 1880, pp. 364-369.

This paper gives the history of the find, its determination by Lesquereux, analysis of slate and remarks by Frazer.

——— A Hudson River fossil plant in the Roofing slate that is associated with the chlorite slate and metamorphic limestone in Maryland, adjoining York and Lancaster Counties, Pennsylvania.

Amer. Jour. Sci., 3 ser., vol. xix, 1880, pp. 71-72.

Buthotrephis flexuosa (determined by Lesquereux) in the Peach Bottom slates. Silurian age inferred. Extract from a letter.

Riordan, O. Second Annual Report of Owen Riordan, Inspector of Mines for Allegany and Garrett Counties. For year ending Dec. 1879. 8vo. 31 pp.

Md. House and Senate Doc., 1880 [J].

RUSSELL, I. C. On the former extent of the Triassic Formation of the Atlantic States.

Amer. Nat., vol. xiv, 1880, pp. 703-712.

The author concludes "that the Triassic rocks in the Atlantic states were formed in one estuary, in the northern end of which sandstone and shales were deposited, being subjected to a greater subsidence than the southern extremity, where the shores were low and favorable for the accumulation of carbonaceous mud and peat" (p. 711).

STEVENSON, J. J. Surface Geology of Southwest Pennsylvania and adjacent portions of West Virginia and Maryland. (Read Apr. 1879.)

Proc. Amer. Phil. Soc., vol. xviii, 1879, pp. 289-316.

A study of the terraces in Garrett and Allegany counties. The present physiography is considered due to the erosion which accompanied the submergence and emergence of Glacial time.

WYSONG, THOMAS TURNER. The Rocks of Deer Creek, Harford County, Maryland; Their Legends and History. Baltimore, 1880. Printed by A. J. Conlon.

The author devotes one page (86) to the chrome pits and two to the slate series (87-88). A popularly written account.

1881.

BROWN, T. Report of T. Brown, Inspector of Mines for Allegany and Garrett counties.

Md. House and Senate Doc., 1881, F.

FRAZER, P., JR. Some Copper Deposits of Carroll County, Maryland.

Trans. Amer. Inst. Min. Eng., vol. ix, 1881, pp. 33-40.

Maps and sections are given, also several analyses and an estimate of the amount of ore available. The deposits are situated near New Windsor. The workings are now abandoned and the shaft filled up.

HEILPRIN, ANGELO. On the Stratigraphical Evidence Afforded by the Tertiary Fossils of the Peninsula of Maryland.

Proc. Acad. Nat. Sci., Phila., vol. xxxii, 1880, pp. 20-33.

Holds that the Medial Tertiary is not synchronous with the South Carolina deposits (Conrad), and that deposits intermediate between the Eocene of Fort Washington and the Pliocene of the southeast extremity of the peninsula belong to two different periods of formation; the later belonging to the Miocene, the older to the Oligocene.

JOHNSON, GEORGE. History of Cecil County, Maryland. 8vo. 548 pp. I-XII. map. Elkton, 1881.

Contains data indicating the gradual recognition and utilization of the natural resources of the area.

LEIDY, JOSEPH. Description of Vertebrate remains chiefly from the Phosphate beds of South Carolina.

Jour. Acad. Nat. Sci., Phila., 2nd ser., vol. viii, 1881, pp. 209-261.

Gives Myliobates gigas, M. pachyodon and Aetobatis arcuatus from Charles county, Md., pp. 241-243, 245.

LEWIS, H. C. On Jurassic Sand.

Proc. Acad. Nat. Sci., Phila., vol. xxxii, 1881, p. 279.

Describes sands from Elkton which he correlates with the "Hasting sand." Also mentions a capping of "Bryn Mawr gravels" in the same area.

MILLER, S. A. North American Mesozoic and Cenozoic Geology and Paleontology. 8vo. 338 pp. Cincinnati, 1881.

See also Jour. Cinn. Soc. Nat. Hist., vol. ii, 1879, pp. 140-161, 223-244; vol. iii, 1880, pp. 9-32, 79-118, 165-202, 245-288; vol. iv, 1881, pp. 3-46, 93-144, 183-234.

Brief general statements regarding the Eocene Deposits of the Middle Atlantic Slope are made by the author.

PRIME, FREDERICK. Supplement II to a catalogue of official Reports upon Geological Surveys of the United States and Territories and of British North America.

Trans. Amer. Inst. Min. Eng., vol. ix, 1881, pp. 621-632.

A list of reports upon the geology of Maryland to replace the list given in the catalogue referred to in the present title (1879).

SCHARF, J. T. History of Baltimore City and County. 4to. Phila. 1881.

Topography and geology of the country, by Prof. P. R. Uhler, pp. 13-32.

1882.

ANON. Pennsylvania and Maryland Boundaries.

Pennsylvania Mag. Hist., vol. vi, 1882, pp. 412-434.

GARRETSON, FREDERICK. Vibration of Rocks in Patapsco Valley, Md.

Pop. Sci. Mo., vol. xx, 1882, pp. 541-543.

Description of certain intermittent earth tremors which arise not from the impact of falling water, but which are "due to a definite relation between the vibrations of the river and what may be called the key-note of the bed-rock over which it flows."

HEILPRIN, ANGELO. Note on the Approximate Position of the Eocene Deposits of Maryland.

Proc. Acad. Nat. Sci., Phila., vol. xxxiii, 1881, pp. 444-447.

Correlates the Eocene between the Piscataway sands and the Marlborough rock with the Thanet sands of England, and the Poracheux sands of Paris, and near the base or lower than the Buhrstone of Alabama.

——— On the relative ages and classification of the Post-Eocene Tertiary Deposits of the Atlantic Slope.

Proc. Acad. Nat. Sci., Phila., vol. xxxiv, 1882, pp. 150-186.

(Abst.) Amer. Jour. Sci., 3 ser., vol. xxiv, 1882, pp. 228-229. Amer. Nat., vol. xvii, 1883, p. 308.

Treats especially of the deposits in Maryland, Virginia, North Carolina and South Carolina, and concludes that the South and North Carolina deposits represent approxi-

mately the same geological horizon. 2. That the Virginia deposits indicate a horizon lower (older) in the geological scale than that of either of the formations just mentioned. 3. That the Maryland deposits indicate two well-marked horizons, of which the upper one is the correspondent of the Virginian.

HITCHCOCK, C. H. The Crystalline Rocks of Virginia compared with those of New England.

Trans. Amer. Inst. Min. Eng., vol. x, 1882, 477-480.

The correlation of the pre-Cambrian rocks of Virginia and Maryland with those of New Hampshire. The author regards the belt between Washington and Harper's Ferry on the Potomac as Huronian.

JONES, HOWARD GRANT. Notes on the Cumberland or Potomac Coal Basin. (Read Sept. 11, 1880.)

Proc. Amer. Phil. Soc., vol. xix, 1882, pp. 11-110.

Section along Georges Creek from the Lower Barren Measures to the Pocono Sandstone.

LESLEY, J. P. (The Cumberland or Potomac Coal Basin.) Remarks on the paper by Mr. Jones.

Proc. Amer. Phil. Soc., Phila., vol. xix, 1882, p. 110.

SCHARF, J. T. History of Western Maryland, being a history of Frederick, Montgomery, Carroll, Washington, Allegany, and Garrett Counties from the earliest period to the present day. 2 vols. 4to. Phila. 1882.

Topography and Geology by P. R. Uhler, pp. 13-46.

WHITE, I. C. Notes on the Geology of West Virginia. A Rectification of the Section made by Mr. Howard Grant Jones, M. S. (Read June 17, 1881.)

Proc. Amer. Phil. Soc., vol. xix, 1882, pp. 438-446.

Gives a detailed columnar section along the north Potomac 1520 feet high, extending from the Medina slates to the upper Coal Measures above Pittsburgh Coal.

1883.

ANON. Mining Notes.

Eng. and Min. Jour., vol. xxxvi, 1883, p. 315.

Chronicles the finding of three strata of marl-bearing shells and a large jaw-bone near Cambridge.

ASHBURNER, CHAS. A. Anthracite.

Mineral Resources U. S., 1882, Washington, 1883, pp. 58-60.

Statistics of shipments from 1873-1882 and price per ton.

BAILEY, J. TROWBRIDGE. The Copper Deposits of Adams County, Pennsylvania.

Eng. and Min. Jour., vol. xxxv, 1883, pp. 88-89.

Origin and geological occurrences of the South Mountain ores in Adams county, Pa., and Washington county, Md.

Brantly, W. T. Maryland.
Encyclopedia Britannica, vol. xv, New York, 1883, pp. 602-605.
Short general description of the topography and geology of the state (Uhler's?).

Burnham, S. M. History and Uses of Limestones and Marbles. 8vo. Ill. 392 pp. Boston, 1883.
Maryland, pp. 57-58.

Chester, F. D. On Boulder Drift in Delaware.
Amer. Jour. Sci., 3rd ser., vol. xxv, 1883, pp. 18-21.

——— Observations upon Stratified Drift in Delaware.
Amer. Jour. Sci., 3rd ser., vol. xxv, 1883, pp. 436-440.
(Rev.) Science, vol. ii, 1883, p. 380 (W. M. D.).
Considers Champlain depression more than 330 feet, possibly as much as 1000 feet.

Clerk, F. L. The Mining and Metallurgy of Zinc in the United States. Mineral Resources U. S. 1882. Washington, 1883. p. 365.
Mentions zinc ores in Silurian of Maryland which have been worked and abandoned.

Cook, George H. The change of Relative Level of the Ocean and the Uplands of the Eastern Coast of North America.
Proc. Amer. Assoc. Adv. Sci., vol. xxxi, 1883, pp. 400-408.
A general paper with reasoning applicable to Maryland. Writer regards oscillation connected with ice movements as the principal factors.

Day, D. T. Chromium.
Mineral Resources U. S., 1882, Washington, 1883, p. 428.
Cites new discovery in North Carolina, and gives statistics as to the amount mined and the price paid per ton in Baltimore.

D'Invilliers, E. V. The Geology of the South Mountain Belt of Berks County.
Rept. 2nd Geol. Surv. Pa. DDD, vol. ii, part 1, Harrisburg, 1883, pp. 17-18.

Fontaine, Wm. M. The Older Mesozoic Flora of Virginia.
Mono. U. S. Geol. Surv. No. 6, 1883, 144 pp., 54 plates.
House Misc. Doc., 47th Cong., 2nd Sess., vol. xiv, No. 43.
Reference to Mesozoic beginning on the Palisades. In Maryland it contains no coal, and no plants have been found, though search would probably reveal them. It is characterized by the large amount of red strata that it contains.

Hunt, T. Sterry. A historical account of the Taconic question in geology, with a discussion of the relations of the Taconic series to the older crystalline and to the Cambrian rocks.
Trans. Royal Soc., Canada, vol. i, sec. 4, 1883, pp. 217-270.

Leconte, Jas. Elements of Geology. 2nd edition, New York, 1883.
Pages 451 and 471 contain certain references to Maryland.

LESLEY, J. P. The Geology of Chester County, Pennsylvania.
Rept. 2nd Geol. Surv. of Pa. C-4, Harrisburg, 1883.
Deals with the geological formations along the border of the state and their extension into Maryland.

McGEE, W J (Note on buried forest of Washington, D. C.)
Amer. Nat., vol. ii, 1883, p. 724.
Tells of the finding of remains of a prequaternary forest near Washington.

SMOCK, J. C. The Useful Minerals of the United States.
Mineral resources U. S., 1882, Washington, 1883, pp. 664, 690-693.
Gives list of minerals, their localities and the present state of workings in Maryland.

SWANK, J. M. Iron Ore and its Products.
Mineral Resources U. S., 1882, Washington, 1883, pp. 128-137.
Statistics showing marked increase in the output from Maryland in the years following 1876.

UHLER, P. R. Geology of the Surface Features of the Baltimore Area.
Johns Hopkins Univ. Cir. No. 21, vol. ii, 1883, pp. 52-53.
(Abst.) Science, vol. i, 1883, pp. 75-76, 277.
Describes the general features of the area and considers Archean to have been metamorphosed during Jurassic Period.

WILBUR, F. A. Marls.
Mineral Resources U. S., 1882, Washington, 1883, p. 522.
Mentions belt of Cretaceous and Tertiary marls extending across the state.

——— Clay.
Mineral Resources U. S., 1882, Washington, 1883, pp. 465-475.
Mentions fire-clay found at Mt. Savage, Allegany county, with analyses (p. 468); also pottery clay or kaolin in Harford and Cecil counties (p. 470).

WILLIAMS, ALBERT, JR. (Editor). Building Stones.
Mineral Resources U. S., 1882, Washington, 1883, pp. 451-452.
Statistics of the stone industry in Maryland for 1882.

1884.

ADAMS, W. H. The Pyrites Deposits of Louisa County, Va.
Trans. Amer. Inst. Min. Eng., vol. xii, 1884, pp. 527-535.
Bare mention of the pyrites deposits of Cecil county, Md.

ANON. Mining Notes.
Eng. and Min. Jour., vol. xxxviii, 1884, New York, 1884.
Granite quarries at Lapidum, Harford county, p. 9.
Alleged discovery of zinc ore in Anne Arundel county, p. 400.

Aydelott, Wm. T. Report of Commissioner of Maryland for Surveying and Marking the Boundary Line between the States of Maryland and Virginia. Annapolis, 1884. 22 pp.

Md. House and Senate Doc., 1884, K.

Brown, T. Report of T. Brown, Inspector of Mines for Allegany and Garrett counties. Annapolis, 1884. 64 pp.

Md. House and Senate Doc., 1884, D.

Chester, Frederick D. The Quaternary Gravels of Northern Delaware and Eastern Maryland, with map.

Amer. Jour. Sci., 3rd ser., vol. xxvii, 1884, pp. 189-199.

The author divides the formations into the Philadelphia Clay and the Red Gravels and concludes that at the close of the Glacial period the land was depressed at least 350 feet.

——— Preliminary notes on the Geology of Delaware—Laurentian, Paleozoic, and Cretaceous Areas.

Proc. Acad. Nat. Sci., Phila., vol. xxxiv, 1884, pp. 237-259.

This paper describes the area adjoining Maryland and shows the relationship of the Maryland deposits to those of New Jersey.

Clarke, F. W. Report of work done in the Division of Chemistry and Physics. 1883-84.

Bull. U. S. Geol. Survey No. 9, Washington, 1884, p. 9.

Also House Misc. Doc., 48 Cong., 2nd Sess., vol. xvi, No. 41.

Analysis by T. M. Chatard of gahnite from near Colesville, Montgomery county.

Frazer, P., Jr. The Peach Bottom Slates of Southeastern York and Southern Lancaster Counties.

Trans. Amer. Inst. Min. Eng., vol. xii, 1884, pp. 355-358. Plates and section.

(Abst.) Amer. Jour. Sci., 3 ser., vol. xxix, 1884, p. 70.

Discussion of a section along the Susquehanna river northward from the Maryland line. Also a letter from Prof. James Hall regarding the probable age of the slates, which he considers are either the Hudson river or the Quebec group from the presence of forms allied to Holymenites, Lamnantes lagranger and graptolithus.

——— An Hypothesis of the Structure of the Copper Belt of the South Mountain.

Trans. Amer. Inst. Min. Eng., vol. xii, 1884, pp. 82-90, map.

Gannett, Henry. A Dictionary of Altitudes in the United States.

Bull. U. S. Geol. Survey No. 5, Washington, 1884, pp. 129-132.

House Misc. Doc., 48th Cong., 2nd sess., vol. xvi, No. 41.

A large number of altitudes is given.

Heilprin, Angelo. Contributions to the Tertiary Geology and Paleontology of the United States. 4to. 117 pp., map. Phila. 1884.

——— The Tertiary Geology of the Eastern and Southern United States.

Jour. Acad. Nat. Sci., Phila., vol. ix, 2nd ser., 1884-95, pp. 115-154, pl. iv.

Gives a systematic review and analyses of the formation taken as a whole, and a concise statement of the geology of the Tertiary period in all of those states of the Atlantic and Gulf border where the formation has been determined; each of these states then is considered separately. The second division treats of the age and classification of the post-Eocene Tertiary deposits of the Atlantic Slope, and contains carefully prepared faunal lists of Md., Va., N. C., and S. C. Md. references, pp. 10-14, 48-49, 52, 58, 59, 69-78.

——— North American Tertiary Ostreidae.

4th Ann. Rept. U. S. Geol. Surv., 1882-83, Washington, 1884, pp. 309-316. (Appendix I to C. A. White's Fossil Ostreidae of North America).

Gives Ostrea compressirostra, Say (309), O. eversa, Melville (310), O. borealis, Lamarck (312), O. virginica, Gmelin (314).

——— The Tertiary Geology of the Eastern and Southern United States.

Jour. Acad. Nat. Sci., Phila., 2 ser., vol. ix, 1884, pp. 115-154, map.

A monographic study of the formations and a correlation of the different areas, among themselves and with those of Europe. Description of the Eocene and Miocene formations with name of fossils. Pages 124-128 refer especially to Maryland, although frequent mention is made throughout the entire paper. Introduces terms Marylandian, Virginian, etc.

Henderson, C. Hanford. The Copper Deposits of the South Mountain.

Trans. Amer. Inst. Min. Eng., xii, 1884, pp. 85-90, map.

Description of the area dealing with the properties, in Pennsylvania more especially.

Huntington, J. H., Monroe, Chas. E., Singleton, H. K. Descriptions of Quarries and Quarry Regions compiled from notes of Messrs. Huntington, Monroe and Singleton.

Tenth Census, vol. x, Washington, 1884, pp. 175-179.

Gives the occurrence and characteristics of many of the state building stones.

This is a separate division of the Report on the Building Stones of the United States.

McCreath, Andrew S. The Mineral Wealth of Virginia, tributary to the Norfolk and Western and Shenandoah Valley Railroad Companies. Harrisburg, Pa., 1884.

Contains several references to Maryland localities and their economic resources.

Marcou, Jules. Mapoteca Geologica Americana—A catalogue of geological maps of America (North and South), 1752-1881.

Bull. U. S. Geol. Surv. No. 7, 1884.

House Misc. Doc., 48th Cong., 2nd sess., vol. xvi, No. 41.

Reference to maps of Tyson, Daddow and Bannon et als.

MERRILL, GEO. P. (Notes on the Building stones of Washington, D. C.)

Tenth Census, vol. x, Washington, 1884, p. 357.

——— Preliminary note on the Crystalline schists of the District of Columbia.

Proc. U. S. Nat. Mus., vol. vi, 1884, pp. 159-161.

(Abst.) Science, vol. ii, 1883, pp. 829-830.

The prevailing indigenous rock of the District is an extremely variable hornblende, chlorite or micaceous schist.

PHILLIPS, HENRY, JR. Early Proceedings of the American Philosophical Society (1744-1838).

Proc. Amer. Phil. Soc., vol. xxii (2), 1884.

Contains references to early papers and early discoveries.

RAU, CHAS. Prehistoric Fishing in Europe and North America.

Smithsonian Contrib. Knowledge, vol. xxv, 1884, 360 pp.

Pages 235-239 are devoted to a discussion of the shell heaps of Maryland (based on notes of Dr. E. R. Raynolds and J. D. McGuire which have proved liable to confusion with Tertiary deposits. (See Conrad and Vanuxem.)

ROGERS, WILLIAM BARTON. A reprint of Annual Reports and other papers, on the Geology of the Virginias. sm. 8vo. Appleton, 1884.

Contains pocket maps and sections along the Potomac.

SMOCK, J. C. Geologico-geographical Distribution of the Iron Ores of the Eastern United States.

Eng. and Min. Jour., vol. xxxvii, New York, 1884, pp. 217-218, 230-232.

Trans. Inst. Min. Eng., vol. xii, 1884, pp. 130-144.

Reference to occurrence of iron ores in Maryland, including the Allegany county occurrence of siderite, the Washington county ores which are of Silurian age, and magnetite at Deer Creek, Harford county.

SPENCER, F. W., and KELLY, THOS. C. Statistics of Building Stones.

Tenth Census, vol. x, Washington, 1884, pp. 45-105 of Report on Building Stones.

Maryland references, pp. 46, 48, 50, 74-75.

SWANK, JAMES M. History of the Manufacture of Iron in all Ages. Phila. 1884.

Special chapter entitled "Early enterprises in Maryland," pp. 182-197. The first works were at North East and Principio. See also pp. 202-203.

WALLING, H. F. Topographical Indications of a Fault near Harper's Ferry. (Abst.)

Bull. Phil. Soc., Washington, vol. vi, 1884, pp. 30-32.

Mentions the discontinuous extension of the Blue Ridge at Harper's Ferry in support of increased corrugation and steepness of dip eastward with reversed folding. The downthrow to the west.

WEBSTER, A. L. On an excursion Map of Baltimore and its neighborhood.

Johns Hopkins Univ. Cir. No. 30, vol. iii, 1884, p. 80.

Gives an account of the sources and formation of the Field Club map.

WEEKS, JOSEPH D. Report on the Manufacture of Coke.

Tenth Census, vol. x, Washington, 1884.

For manufacture and use of coke in Maryland, see p. 25.

WHITE, C. A. A review of the Fossil Ostreidae of North America, and a comparison of the Fossil with Living Forms. Appendix I by Angelo Heilprin: North American Tertiary Ostreidae. Appendix II by John A. Rider: A Sketch of the Life History of the Oyster.

4th Ann. Rept. U. S. Geol. Surv., 1882-83, Washington, 1884, pp. 281-430.

(See Heilprin.)

WILLIAMS, GEORGE H. Preliminary notice of the Gabbros and Associated Hornblende rocks in the vicinity of Baltimore.

Johns Hopkins Univ. Cir. No. 30, vol. iii, 1884, pp. 79-80.

Distinguishes and describes "Anorthite amphibolite" and olivine bronzite gabbro.

——— Note on the so-called Quartz Porphyry at Hollins Sta. north of Baltimore.

Johns Hopkins Univ. Cir. No. 32, vol. iii, 1884, p. 131.

Shows Tyson's "quartz porphyry is an autoclastic rock formed from adjacent gneiss during dynamic metamorphism."

WINSOR, JUSTIN (Editor). A Narrative and Critical History of America. Vol. iii. English Explorations and Settlements in North America, 1497-1689. Houghton, Mifflin & Co., Boston, 1884. pp. 127-169, 517-562.

Contains interesting notes on the gradual recognition of the resources and physical features of the state. Chapter on Maryland by W. T. Brantly; that on Virginia by R. A. Brock.

1885.

ANON. General Mining News—Maryland.

Eng. and Min. Jour., vol. xl, 1885, p. 422.

Purchase of Frederick county property by a California mining company.

——— General Mining News—Maryland.

Eng. and Min. Jour., vol. xl, 1885, p. 294.

Search for silver ore in the vicinity of Cumberland.

ARMSTRONG, S. C. (compiler). Coal.

Mineral Resources U. S., 1883-84, Washington, 1885.

General remarks on George's Creek Coal field, pp. 49-50; statistics on coal product, 1880-1884, p. 12.

Brock, R. A. Early Iron Manufacture in Virginia, 1619-1776.

Proc. U. S. Nat. Mus., vol. viii, 1885, pp. 77-80.

The author refers, p. 79, to the purchase of iron from Maryland in early times.

Chester, Frederick D. The Gravels of the Southern Delaware Peninsula.

Amer. Jour. Sci., 3rd ser., vol. xxix, 1885, pp. 36-44.

Post Glacial bowlders of Snow Hill, Md., pp. 41-43. This deals especially with the Quaternary and modern deposits, though discussing the surface deposits of the whole area.

——— A Review of the Geology of Delaware, Results of a survey in progress. (Abst.)

Proc. Amer. Assoc. Adv. Sci., vol. xxiii, 1885, pp. 400-401.

Clarke, F. W. Mica.

Mineral Resources U. S., 1883-84, Washington, 1885, pp. 906-912.

Mentions the mica mines of Howard and Montgomery counties which are not at present worked, p. 908.

Day, D. T. Chromium.

Mineral Resources U. S., 1883-84, Washington, 1885.

Gives short history of chromium industry in Maryland, p. 567.

——— Cobalt.

Idem, p. 544.

Mentions linnaeite and niccolite from Finksburg and Sykesville, Carroll county.

——— Manganese.

Idem, p. 551.

Black oxide of manganese formerly mined at Brookville, Montgomery county, but now abandoned.

Gannett, Henry. Administrative Reports. Topographic work in Maryland.

5th Ann. Rept. U. S. Geol. Surv., 1883-84, Washington, 1885, pp. 7-8.

Notes on the topographic work done in Western Maryland and about Washington.

——— Administrative Reports. Topographic work in Maryland.

6th Ann. Rept. U. S. Geol. Surv., 1884-85, Washington, 1885, p. 8.

——— Boundaries of the United States and of the several states and territories with a historical sketch of the territorial changes.

Bull. U. S. Geol. Surv. No. 13, 1885, pp. 79-90.

House Misc. Doc., 48th Congress, 2nd sess., vol. xli.

Contains history of the grants and the determinations of the location of the boundary lines between Maryland and Pennsylvania, Delaware, Virginia and West Virginia.

KUNZ, G. F. Precious Stones.

Mineral Resources U. S., 1883-84, Washington, 1885.

Mentions Harford county serpentine, p. 776; and also amber from Cape Sable and Chesapeake and Delaware Canal based on Troost's paper in Amer. Jour. Sci. 1832, p. 780.

MCGEE, W J The Geology of the District.

Evening Star, Washington, July 11, 1885.

Regards the Potomac as the American equivalent of the European Neocomian.

ROBINSON, T. The Strata exposed in the East Shaft of the Water Works Extension. (Abst.)

Bull. Phil. Soc., Washington, vol. vii, 1885, pp. 69-71.

SCHARFE, WALTER R. The Boundary Dispute between Maryland and Pennsylvania.

Pennsylvania Mag. Hist., vol. ix, 1885, pp. 241-271.

SPENCER, J. W. Occurrence of Boulders of Decomposition at Washington, D. C., and elsewhere.

Amer. Nat., vol. xix, 1885, pp. 163-165.

Considers the bearing of decomposition boulders upon the glacial drift.

SWAIN, GEO. F. Report on the water power of the Middle Atlantic Water-shed.

Tenth Census, vol. xvi, Washington, 1885, pp. 513-660.

Describes the topography, flow, and fall of the principal rivers of Maryland, etc., p. 142.

SWANK, JAS. M. Iron ores in the United States.

Mineral Resources U. S., 1883-84, Washington, 1885.

Statistics of pig iron, 1880-84, p. 252. Simply says, "Very little Bessemer pig iron has been made in Maryland."

WILBUR, F. A. Clays.

Mineral Resources U. S., 1883-84, Washington, 1885.

Mentions clay belt. "Brick made from this clay are noted for their great hardness and cherry-red color," p. 696. Gives characteristics of pottery made from clays of Howard and Anne Arundel counties, p. 700.

WILLIAMS, JR. A. (Editor). Infusorial Earth.

Mineral Resources U. S., 1883-1884, Washington, 1885, p. 720.

Gives occurrence and analysis of "tripoli" from near Dunkirk, Calvert county. Subsequent remarks (M. R., 1885) show that the output was not over 250 tons in 1885.

WILLIAMS, GEORGE H. Dykes of apparently Eruptive Granite in the neighborhood of Baltimore.

Johns Hopkins Univ. Cir. No. 38, vol. iv, 1885, pp. 65-66.

Describes the pegmatic dykes at Jones Falls, Orange Grove, Ilchester, Relay and Avalon.

——— Amphibole-Anthophyllite from Mt. Washington, Baltimore Co.

Amer. Nat., vol. xix, 1885, 1884.

Chemical analyses and description of a monoclinic hornblende with the composition of anthophyllite occurring as the gauge of chalcophyrite ore.

——— Hornblende aus St. Lawrence Co., N. Y.; amphibol-anthophyllit aus Gegend von Baltimore (etc.).

N. J. B., 1885, ii, p. 170.

1886.

——— General Mining News—Maryland.

Eng. and Min. Jour., vol. xlii, 1886, p. 29.

The quarrying of large blocks of marble at the Beaver Dam quarries.

Ibid. p. 29.

Ashburner, Chas. A. Coal.

Mineral Resources U. S., 1885, Washington, 1886, pp. 33-34.

Gives statistics on shipments, production, prices and wages in George's Creek coal field.

Benton, Edward R. Notes on the samples of iron ore collected in Maryland.

Tenth Census, vol. xv, Mining Industries of the U. S., Washington, 1886, pp. 245-260.

Notes, geological sections and analyses (p. 544).

Chester, F. D. Results from a study of the Gabbros and associated Amphibolites in Delaware.

Proc. Amer. Assoc. Adv. Sci., vol. xxxiv, 1886, pp. 215-216.

Clarke, F. W. Report of work done in Division of Chemistry and Physics, 1884-85.

Bull. U. S. Geol. Survey No. 27, 1886, p. 72.

House Misc. Doc., 49th Cong., 2nd sess., vol. viii, No. 163.

Analysis by R. B. Briggs of brown iron ore from near Timonium, Maryland.

Cook, R. S. The Manufacture of Fire-Brick at Mount Savage, Maryland.

Trans. Amer. Inst. Min. Eng., vol. xiv, 1886, pp. 698-706.

Occurrence and composition of the clay used and description of the processes employed.

Day, D. T. Chromium.

Mineral Resources U. S., 1885, Washington, 1886, p. 358.

"At Soldier's Delight, Maryland, chrome was mined to the extent of 100 tons."

Frazer, Persifor, Jr. General Notes. Sketch on the Geology of York County, Pennsylvania. (Read Dec. 4, 1885.)

Proc. Amer. Phil. Soc., Phila., vol. xxiii, 1886, pp. 391-410.

Discussion on the general structures, equally applicable to Maryland.

GOODE, G. BROWN. Presidential address. Beginnings of Natural History in America.

Proc. Biol. Soc., Washington, vol. iii, 1886, pp. 35-105.

Gives account of early scientific explorations.

McGEE, W J Geological Formations underlying Washington and Vicinity.

Rept. Health Officer of the District of Columbia for the year ending June 30, 1885, by Dr. S. Townsend, pp. 19-21, 23-35.

(Abst.) by author in Amer. Jour. Sci., 3rd ser., vol. xxxi, 1886, pp. 473-4.

Describes the composition and distribution of the Columbia and underlying Potomac formations and something of the Crystalline rocks.

——— Geography and Topography of the head of Chesapeake Bay. (Read to Amer. Assoc. Adv. Sci. 1886.)

(Abst.) Amer. Jour. Sci., 3 ser., vol. xxxii, 1886, p. 323.

Describes the drainage and topographic features.

PEALE, A. C. Lists and analyses of the mineral Springs of the U. S.

Bull. U. S. Geol. Surv. No. 32, 1886, pp. 51-53.

House Misc. Doc., 49th Cong., 2nd sess., vol. viii, No. 164.

A number of springs are given in a tabulated list. These springs are not used as much as formerly, and some reports of springs of this character do not mention Maryland in the list.

PRIME, FREDERICK, JR. The Coals of the United States.

Tenth Census, vol. xv, Mining Industries of the U. S., Washington, 1886.

Maryland references, p. 855, coal, 895-6, 935-946; copper, 978; zinc, 983, 985, 987-8.

PUMPELLY, R. (Editor). Directory of Mines and Metallurgical Establishments East of the 100th Meridian.

Tenth Census, vol. xv, Mining Industries of the U. S., Washington, 1886.

Maryland references, p. 855, coal, 895-6, 935-946; copper, 978; zinc, 983, 985, 987-8.

——— Geological and Geographical distribution of the Iron Ores of the United States.

Tenth Census, vol. xv, Mining Industries of the U. S., Washington, 1886, pp. 3-36.

Maps, sections. Maryland ores, classed as Cambrian, Silurian, Cretaceous, and Quaternary.

SWANK, JAMES M. Twenty-one years of progress in the manufacture of Iron and Steel in the United States.

Mineral Resources U. S., 1885, Washington, 1886, pp. 180-195.

Gives statistics on pig iron, rails, rolled iron and steel in Maryland.

WEEKS, T. D. Manganese.

Mineral Resources U. S., 1885, Washington, 1886, p. 344.

Refers to deposits of black oxide of manganese "at Brookville, Montgomery county, and another on the Maryland side of the Potomac across from Harper's Ferry. None at present mined in the state."

WILLIAMS, G. H. The Gabbros and Associated Hornblende Rocks occurring in the neighborhood of Baltimore, Md.

Bull. U. S. Geol. Surv. No. 28, 1886, 78 pp., 4 pls.

House Misc. Doc., 49th Cong., 2nd sess., vol. viii, No. 163.

A petrographic study of these rocks accompanied by many photomicrographs, analyses and a map showing the position of actual outcrops and the distribution of rocks inferred therefrom.

——— On a remarkable crystal of pyrite from Baltimore County, Maryland.

Johns Hopkins Univ. Cir. No. 53, vol. vi, 1886, p. 30.

Found west of Cromwell's Bridge road, opposite Summerfield Station. Peculiar luster, color and merohedrism suggest columbite.

1887.

ASHBURNER, CHAS. A. Coal.

Mineral Resources U. S., 1886, Washington, 1887, pp. 224-279.

Statistics, notes, and companies of George's Creek coal district and also the shipments from 1842-1886.

BIRKINBINE, J. The Iron Ores East of the Mississippi river.

Idem, p. 77.

Analysis of brown hematite from central Maryland.

DAY, D. T. Infusorial Earth.

Idem, p. 587.

States that "the production for the year amounted to 1200 short tons with a spot value of $6000." The source is "near Dunkirk, Calvert county."

DUNCAN, P. MARTIN. On a new Genus of the Madreporaria (Glyphastrea Forbesi, Ed. and H. from the Tertiaries of Md., U. S., with Plates).

Quart. Jour. Geol. Soc., London, vol. xliii, 1887, pp. 24-32.

Refers to writings by Milne-Edwards, Julius Haime, M. de Fromentel and others and gives a full description of Glyphastrea Forbesi.

HITCHCOCK, C. H. The Geological Map of the United States.

Proc. Amer. Inst. Min. Eng., vol. xv, 1887, pp. 465-488.

Gives an historical account of the geological maps previously published and shows one drawn in the colors adopted by the International Geological Congress.

MCGEE, W J The Columbia Formation.

Proc. Amer. Assoc. Adv. Sci., vol. xxxvi, 1887, pp. 221-222.

Summary of information concerning the formation.

———Ovibos cavifrons from the Loess of Iowa.

Amer. Jour. Sci., 3rd ser., vol. xxxiv, 1887, pp. 217-220.

A brief discussion of the conditions along the Middle Atlantic slope during Quaternary time. All notes on the size of the boulders deposited in the Susquehanna, Patapsco and Potomac deltas in Quaternary time.

Stevenson, John J. Notes on the Lower Carboniferous groups along the easterly side of the Appalachian area in Pennsylvania and the Virginias.

Amer. Jour. Sci., 3rd ser., vol. xxxiv, 1887, pp. 37-44.

General discussion of the "Umbral" and "Vespertine," containing notes on the "Umbral" of Maryland, pp. 42-44.

Swank, Jas. M. The American Iron Trade in 1886.

Mineral Resources U. S., 1886, Washington, 1887.

Gives statistics on production of iron for the year 1886, p. 18.

——— The American Iron Industry from its Beginning in 1619 to 1886.

Idem, pp. 23-38.

Gives a few interesting historical details concerning the iron industry of Maryland in early times.

White, I. C. Rounded Boulders at High Altitudes along some Appalachian Rivers.

Amer. Jour. Sci., 3rd ser., vol. xxxiv, 1887, pp. 374-381.

Especially pp. 279 and 80 which deal with the bowlders on the eastern side of the Alleghanies. Considers these deposits to be due to different causes; submergence about Washington—even to Cumberland—ice dams (Wright) on western slopes, and snow slides which dammed the mountain streams.

Williams, G. H. On a Plan Proposed for Future Work upon the Geological Map of the Baltimore region.

Johns Hopkins Univ. Cir. No. 59, 1887, pp. 122-123.

——— Notes on the minerals occurring in the neighborhood of Baltimore. 18 pp. Baltimore, 1887.

The minerals are described "in preliminary way" and are enumerated according to their paragenesis in seven classes.

1888.

Anon. Provisions for establishing meridian lines in the State of Maryland and for observing the magnetic variation. Maryland Code, vol. i, pp. 424-426. 1888.

Ashburner, Chas. A. Coal.

Mineral Resources U. S., 1887, Washington, 1888, pp. 169, 171, 177, 263-270, 337.

Statistics of coal trade, wages and shipment.

Bodfish, D. H. On the new Topographical Map of Baltimore and vicinity.

Johns Hopkins Univ. Cir. No. 65, vol. vii, 1888, p. 72.

Letter describing map.

Clark, Wm. B. On three Geological Excursions made during the months of October and November, 1887, into the southern counties of Maryland.

Johns Hopkins Univ. Cir. No. 63, vol. vii, 1888, pp. 65-67.

Stratigraphic description and lists of fossils.

——— Geology of Eastern Maryland.

Johns Hopkins Univ. Cir. No. 65, vol. vii, 1888, p. 73.

Abstract of lecture showing that there is no proof of the deposition of sediment prior to Middle Mesozoic time, to the east of the Archean belt.

Day, D. T. (Editor). Infusorial Earth.

Mineral Resources U. S., 1887, Washington, 1888, p. 554.

Analysis of infusorial earth from Pope's Creek made by P. de P. Ricketts of New York.

——— Useful Minerals of the United States.

Idem, pp. 739-742.

Gives list of economic minerals and their occurrence and workings.

Day, Wm. C. Structural Materials.

Idem.

Statistics of the granite industry for 1887, p. 515; marble, p. 518; slate, p. 524; lime, p. 533; brick, pp. 536-538. Quarry opened at Guilford by Messrs. Smith & Johnson, p. 515.

Gilbert, G. K. Administrative Reports. Geologic and Paleontologic Investigations.

7th Ann. Rept. U. S. Geol. Surv., 1885-86, Washington, 1886, p. 67.

Hall, James, and Clarke, J. M. Paleontology, vol. vii. Text and Plates containing descriptions of the Trilobites and other Crustacea of the Oriskany, Upper Helderberg, Hamilton, Portage, Chemung and Catskill Groups. Geological Survey New York. Albany, 1888.

Description and figures of numerous forms from Cumberland and vicinity.

Hobbs, William H. On the rocks occurring in the neighborhood of Ilchester, Howard county, Maryland; Being a detailed study of the area comprised in sheet No. 16 of the Johns Hopkins University map.

Johns Hopkins Univ. Cir. No. 65, vol. vii, 1888, pp. 69-70.

(Abst.) Amer. Nat., vol. xxii, 1888, p. 527.

Describes hypesthene gabbros, gabbro-diorite, and hornblende gneiss as a series due to progressive metamorphism; pyroxenites changing to talc and serpentine; granite porphyry carrying allanite-epidote.

HUNTINGTON, OLIVER WHIPPLE. Catalogue of all recorded Meteorites with a Description of the specimens in the Harvard College collection, including the cabinet of the late J. Lawrence Smith (presented June 15, 1887).

Proc. Amer. Acad. Arts and Sci., n. s. vol. xv, whole ser. xxiii, Boston, 1888, pp. 37-110.

Mentions meteorites which fell at Nanjemoy, Charles county, Feb. 10, 12 A. M., 1825, No. 98 in Harvard College; and at Emmitsburg, 1854 (?), No. 211.

KNOWLTON, F. H. The Fossil Lignites of the Potomac Formation.

Proc. Amer. Assoc. Adv. Sci., vol. xxxvii, 1888, pp. 206-208.

Abstract of the original paper, which itself is an abstract of Bull. U. S. Geol. Surv. No. 56.

MARSH, O. C. Notice of a New Genus of Sauropoda and other new Dinosaurs from the Potomac Formation.

Amer. Jour. Sci., 3rd ser., vol. xxxv, 1888, pp. 89-94, Figs. 1-9.

Description of remains collected largely from the vicinity of Muirkirk, Prince George County, by J. B. Hatcher under the auspices of the U. S. Geol. Surv., including Pleurocoelus nanus (gen. et sp. nov.), Pleurocoelus altus (sp. nov.), Allosaurus medians (sp. nov.) and Coelurus gracilis (sp. nov.).

MCGEE, W J The Geology of the Head of Chesapeake Bay.

7th Ann. Rept. U. S. Geol. Surv., 1885-86, Washington, 1888, pp. 537-646, plates 56-71.

(Abst.) Amer. Geol., vol. i, 1887, pp. 113-115.

The author discusses the hydrography, topography, exposures and geological formations; and concludes with a summary of the Quaternary history as recorded in the Columbian formation, in its local and more general application.

——— Administrative Reports. Geologic and Paleontologic Investigations.

7th Ann. Rept. U. S. Geol. Surv., 1885-86, Washington, 1888, p. 110.

——— The Columbia Formation.

Proc. Amer. Assoc. Adv. Sci., vol. xxxvi, 1888, pp. 221-222.

Brief paper on general relations and summary.

——— Three Formations of the Middle Atlantic Slope.

Amer. Jour. Sci., 3rd ser., vol. xxxv, 1888, pp. 120-143, 328-331, 367-388, 448-466, plate ii.

(Absts.) Nature, vol. xxxviii, 1888, pp. 91, 190.
Amer. Geol., vol. ii, 1888, pp. 129-131.

Introduction (pp. 120-143), and Potomac (pp. 328-331), Appomattox (pp. 367-388), Columbia (pp. 448-466), Conclusion.

——— Paleolithic man in America; his Antiquity and Environment.

Pop. Sci. Mo., vol. xxxiv, 1888-89, pp. 20-36.

Discusses the geology at the head of the Chesapeake Bay.

MEYER, OTTO. Some remarks on the present state of our Knowledge of the North American Eastern Tertiary.

Amer. Geol., vol. ii, 1888, pp. 88-94.

Objects to Heilprin's correlations.

SWANK, JAS. M. The Iron and Steel Industries of the United States in 1887 and 1888.

Mineral Resources U. S., 1887, Washington, 1888.

Statistics, p. 11. First coke furnaces in the South established near Frostburg in 1839, p. 22.

UHLER, P. R. Sketch of the History of the Maryland Academy of Science.

Trans. Maryland Acad. Sci., vol. i, 1888, pp. 1-10.

——— The Albirupean Formation and its nearest relatives in Maryland.

Proc. Amer. Phil. Soc., vol. xxv, 1888, pp. 42-53.

Reply by H. Carville Lewis, pp. 53-54. A. Heilprin, p. 54.

(Uhler) introduces Albirupean and Baltimorean, giving vertical sections and a map showing distribution of his formations.

(Lewis) objects to terms as unnecessary and says that "Albirupean" as used includes Mesozoic. Heilprin agrees with Lewis.

——— Observations on the Eocene Tertiary and its Cretaceous Associates in the State of Maryland.

Trans. Md. Acad. Sci., vol. i, 1888, pp. 11-32.

Description of distribution, characteristics, paleontology, etc., of the Cretaceous and Eocene; and discussions of the relations and correlations of some portions of the latter.

WARD, LESTER F. Administrative Reports. Geologic and Paleontologic Investigations.

7th Ann. Rept. U. S. Geol. Surv., 1885-86, Washington, 1888, p. 125.

——— Evidence of Fossil Plants as to the Age of the Potomac Formation.

Amer. Jour. Sci., 3rd ser., vol. xxxvi, 1888, pp. 119-131.

Concludes that the fossil plants of the Potomac present no serious obstacle to its reference to the Jurassic.

WHITNEY, J. D. Physical Geography and Statistics. Part II. of article on United States.

Encyclopedia Britannica, vol. xxiii, New York, 1888, pp. 791-817.

Gives summary of information on topography, geology, climate, vegetation and mineral resources.

WILLIAMS, GEORGE H. Geology of the Baltimore Region.

Johns Hopkins Univ. Cir. No. 65, vol. vii, 1888, p. 73.

Report of a lecture in which the author refers to the sequence of the eruptions in the Plutonic rocks of the area.

——— Progress of Work on the Archean Geology of Maryland.
Johns Hopkins Univ. Cir. No. 65, vol. vii, 1888, pp. 61-63.
Sketch of Maryland geology and of the relations of the gneisses and eruptives about Baltimore and thence northward.

1889.

Anon. Mining Notes.
Eng. and Min. Jour., vol. xlviii, 1889.
Reference to Gold Mining at Great Falls (pp. 56, 235).

Bryan, O. N. The Cretaceous Formation of Southwestern Maryland.
Amer. Nat., vol. xxiii, 1889, pp. 713-714.
Deposits of Cretaceous age found to outcrop from beneath a covering of Eocene strata. Certain beds at Fort Washington assigned to the Jnrassic.

Clark, Wm. B. Discovery of fossil-bearing Cretaceous strata in Anne Arundel and Prince George Counties, Maryland.
Johns Hopkins Univ. Cir. No. 69, vol. viii, 1889, pp. 20-21.
Description of type localities, enumeration of fauna and correlation with Lower Marls of New Jersey.

Clarke, F. W. Report of work done in the Division of Chemistry and Physics, 1886-87.
Bull. U. S. Geol. Surv. No. 55, 1889.
Also House Misc. Doc., 51st Cong., 1st sess., vol. xxxii, No. 244.
Two analyses of "Triassic Sandstone" from the Jaittelle quarry near Hancock (this is not a Triassic sandstone) (p. 80), and one of lepidomelane from Baltimore (p. 14).

Dutton, C. E. The Charlestown Earthquake of August 31, 1886.
9th Ann. Rept. U. S. Geol. Surv., 1889, pp. 363, 366, 369, 453.
Report of earthquake observations in Maryland, August 31, 1886.

Fontaine, W. M. Potomac or Younger Mesozoic Flora.
Mono. U. S. Geol. Surv., No. 15, 1889, 377 pp., 180 plates.
House Misc. Doc., 50th Cong., 2nd sess., vol. xvii, No. 147.
(Rev.) Amer. Jour. Sci., 3rd ser., vol. xxxix, 1890, p. 520 (L. F. W.).
Introduction, p. 4. A description of some fossil plants from the neighborhood of Baltimore, chiefly from Federal Hill and Ft. Washington, is given including twenty-five new species.

Gannett, Henry. Administrative Reports. Topographic Work in Maryland.
9th Ann. Rept. U. S. Geol. Surv., 1887-88, Washington, 1889, pp. 52-55.
Gives notes as to time and men involved in the surveying of Maryland for that year.

Gill, A. C. Minerals from the chrome pits of Montgomery county, Maryland.
Johns Hopkins Univ. Cir. No. 75, vol. viii, 1889, p. 100.
Description of Chrome—Tourmaline, Fuchsite and Rutile.

HOBBS, WM. H. On the Paragenesis of the Allanite and Epidote as Rock-forming Minerals.

Amer. Jour. Sci., 3rd ser., vol. xxxviii, 1889, pp. 223-228.

(Abst.) Amer. Nat., vol. xxiii, 1889, p. 721.

A study of the epidote-allanite intergrowths found in the porphyritic granites of Ilchester, Md.

KNOWLTON, F. H. Fossil Wood and Lignites of the Potomac Formation. (Read before Amer. Assoc. Adv. Sci. 1888.)

Amer. Geol., vol. iii, 1889, pp. 99-106.

Occurrence at Ft. Washington, White House Landing, Washington City, Baltimore, etc., pp. 101-103. Determination of the trees, pp. 104 et seq. Résumé of Bull. U. S. Geol. Surv. No. 56.

(Abst.) Proc. Amer. Assoc. Adv. Sci., vol. xxxviii, 1889, pp. 206-208.

Amer. Geol., vol. iv, 1890, p. 324.

——— Fossil Wood and Lignite of the Potomac Formation.

Bull. U. S. Geol. Surv. No. 56, Washington, 1889.

House Misc. Doc., 51st Cong., 1st sess., vol. xxxii, No. 244.

Maryland references, pp. 38-43.

MCGEE, W J The Geological Antecedents of Man in the Potomac Valley.

Amer. Anth., vol. ii, 1889, pp. 227-234.

Gives an account of the geological, topographic and climatic history of the Potomac from Mesozoic time.

——— Administrative Reports. Geologic and Paleontologic Investigations.

8th Ann. Rept. U. S. Geol. Surv., 1886-1887, Washington, 1889, pt. i, p. 167.

MARSH, O. C. Administrative Reports. Geologic and Paleontologic Investigations in Maryland.

9th Ann. Rept. U. S. Geol. Surv., 1887-88, Washington, 1889, pp. 114-115.

The results proved conclusively that the Potomac, as shown in the typical localities in Maryland, is of Upper Jurassic age, and contains a rich and varied vertebrate fauna.

MERRILL, G. P. The Collection of Building and Ornamental Stones in the U. S. National Museum.

Smithsonian Rept., 1886, pt. ii, 1889, pp. 277-648, plates 1-9.

Over twenty references to Maryland building stone resources.

MEYER, OTTO. Upper Tertiary Invertebrates from the West Side of Chesapeake Bay. (Read Aug. 1888.)

Proc. Acad. Nat. Sci., Phila., 1888, vol. xl, 1889, pp. 170-171.

Describes Aligena sharpi (n. sp.) and others, but the localities are indefinite, possibly from Yorktown, Va.

RUSSELL, I. C. The Newark System.

Amer. Geol., vol. iii, 1889, pp. 178-182.

A discussion of nomenclature and adoption of the term Newark.

——— Subaerial Decay of Rocks and Origin of the Red Color of Certain Formations.

Bull. U. S. Geol. Surv. No. 52, 1889, 65 pp. 5 plates.

House Misc. Doc., 50th Cong., 2nd sess., vol. xi, No. 138.

(Abst.) Amer. Geol., vol. v, 1890, pp. 110-111.

Citation of illustrations from Maryland and incidentally comparison of the amount of decay in that state with the decay in other states north and south, pp. 9, 12, 13, 23.

SCHUCHERT, CHAS. A list of Fossils Occurring in the Oriskany Sandstone of Maryland, New York and Ontario.

8th Ann. Rept. N. Y. State Geol., Albany, 1889, pp. 50-54.

42nd Ann. Rept. N. Y. State Museum, Albany, 1889, pp. 396-400.

Enumerates 63 species from Cumberland.

UHLER, P. R. Additions to observations on the Cretaceous and Eocene formations of Maryland.

Trans. Md. Acad. Sci., vol. i, 1889, pp. 45-72.

An account of the characteristics, fossils and relations at various localities.

WARD, LESTER F. The Geographical Distribution of Fossil Plants.

8th Ann. Rept. U. S. Geol. Surv., 1886-87, Washington, 1889, part ii, pp. 663-960, maps.

Refers to the fossil plant deposits at Frostburg, Baltimore, Grove Point, Deep Run, Jessup's Cut, and Beltsville, p. 647. Pages 870-872 deal particularly with Maryland.

——— Administrative Reports. Geologic and Paleontologic Investigations.

8th Ann. Rept. U. S. Geol. Surv., Washington, 1889, part i, pp. 184-188.

WHITE, CHAS. A. The North American Mesozoic.

Science, vol. xiv, 1889, p. 160.

(Abst.) Amer. Assoc. Adv. Sci., vol. xxxviii, 1890, p. 207.

Some reference to fossils found by Tyson in Maryland.

WILLIAMS, GEORGE H. Contributions to the Mineralogy of Maryland.

Johns Hopkins Univ. Cir. No. 75, vol. viii, 1889, pp. 99-100.

A supplement to "Notes on the minerals occurring in the neighborhood of Baltimore, 1887." Enumerates minerals and localities about Baltimore and throughout the state.

1890.

ANON. Mining Notes.

Eng. and Min. Jour., vol. xlix, 1890.

Statistics on coal output and accidents, p. 267.

Ashburner, Chas. A. Coal.
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The history of Maryland surveys is given on pp. 312-313.

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Science, n. s., vol. iii, 1896, pp. 582-584.

A description of material found by Mr. Arthur Bibbins at Cape Sable, Md.

MARCOU, JULES. The Jura in the United States.

Science, n. s., vol. iv, 1896, pp. 945-947.

Regards the Potomac formation as Jurassic and refers to Tyson's and Marsh's work.

MARSH, O. C. The Dinosaurs of North America.

16th Ann. Rept. U. S. Geol. Surv., 1894-95, part i, Washington, 1896, pp. 195-244, plates ii-lxxxv.

Many of the forms described were found in Maryland, especially in the Potomac formation.

——— The Jurassic Formation on the Atlantic Coast.

Science, n. s., vol. iv, 1896, pp. 805-816.

Amer. Jour. Sci., 4th ser., vol. ii, 1896, pp. 433-447.

The author claims that the vertebrates indicate the Jurassic age of the Potomac formation.

MARYLAND STATE WEATHER SERVICE. The Climatology and Physical Features of Maryland.

Second Biennial Report of the Maryland State Weather Service for the years 1894 and 1895. Baltimore, 1896.

PHILLIPS, J. A., and LOUIS, HENRY. A Treatise on Ore Deposits. 8vo. 943 pp. Macmillan, 1896.

References to Maryland gold (785), iron (826), chrome (828).

PHILLIPS, P. LEE. Virginia Cartography—a Bibliographical Description.

Smithsonian Misc. Coll. No. 1039, vol. xxxviii, Washington, 1896, 8vo, 85 pp.

Contains historical remarks on many of the old maps covering the area of Maryland.

SCHOTT, C. A. The Secular Variation in Direction and Intensity, of the Earth's Magnetic Force in the United States and in some adjacent foreign countries.

Rept. Supt. U. S. Coast and Geodetic Survey for 1895, Washington, 1896, pt. ii, appendix 1, pp. 167-320.

This is the latest of a series of papers on magnetism which have appeared almost annually in the publications of the Survey. As the subject is somewhat removed from

the aim of the bibliography, the more important papers are only appended. They appeared in Report for 1854, Appendix 43, pp. 143-145; Report for 1856, Appendix 28-30, 32-33, pp. 209-249; Report for 1858, Appendix 24, pp. 191-192; Report for 1859, Appendix 24, pp. 296-305; Report for 1861, Appendix 22, pp. 242-251; Report for 1862, Appendix 19, pp. 212-229; Report for 1874, Appendix S, pp. 72-108; Report for 1885, Appendix 6, pp. 129-274; Report for 1886, Appendix 12, pp. 291-407; Report for 1888, Appendix 7, pp. 177-312; Report for 1890, pp. 274-275.

Van Der Hoogt, Cornelius, Bureau of Immigration. State of Maryland. 1896.

Brief popular summary of the natural resources of Maryland.

Van Hise, C. R. Principles of North American Pre-Cambrian Geology.

16th Ann. Rept. U. S. Geol. Surv., 1894-95, part i, Washington, 1896, pp. 581-843, 2 maps and illustrations.

Gives a few incidental references to the Maryland pre-cambrian.

Walcott, C. D. The Cambrian Rocks of Pennsylvania.

Bull. U. S. Geol. Surv. No. 134, 1896.

House Misc. Doc., 54th Cong., 2nd sess., vol. —, No. 24.

Contains incidental reference to his work with Keith in Frederick county and also to the southern continuation of Pennsylvania formations.

Ward, L. F. Some Analogies in the Lower Cretaceous of Europe and North America.

16th Ann. Rept. U. S. Geol. Surv., 1894-95, part i, Washington, 1896, pp. 463-542, plates xcvii-cvii.

A general discussion of the character and limits of the Potomac, especially of the Middle Atlantic Slope in comparison with the Wealden.

——— Fossil Plants of the Wealden.

Science, n. s., vol. iii, 1896, pp. 869-876.

Refers briefly to the cycads from the Potomac of Maryland.

——— Age of the Island Series.

Science, n. s., vol. iv, 1896, pp. 757-760.

Refers briefly to the Potomac group of Maryland.

Whitney, Milton. Texture of Some Important Soil Formations.

U. S. Dept. Agri., Div. Agri. Soils, Bull. No. 5, Washington, 1896. Illustrated, 23 pp., plates 35.

Six types taken from various portions of Maryland.

Willis, Bailey. The Northern Appalachians.

The Physiography of the United States.

Geographic Monographs I, American Book Co., 169 pp., 1896.

A study of the present topography and its origin.

CARTOGRAPHY.

1526.

Anon. Mappe monde Peinte sur Parchemin par ordre de Henri II Roi de France.

Monuments de la Geographie Publies par M. Jomard, Paris. (Peabody.)

Ayllon's, Lucas Vasquez.

See Kohl, Die Beiden altesten General-Karten von Amerika, Weimar 1860. (Peabody.)

1529 (?).

Ribero.

See Kohl, Die Beiden altesten General-Karten, coast line reproduced in Mag. Amer. Hist. ii, 1878, pp. 257, 1. (Peabody.)

De Verrazano,

Coast line reproduced in Mag. Amer. Hist. ii, pp. 257, 1, 1878.

1554.

Angese, Baptista. No. 4 North America, South of the Penobscot and the Gulf of California, and the west coast of South America to 15° South; etc.

See Winsor, A Bibliography of Ptolemy's Geography. Bull. 18 of Harvard Library, p. 30.

——— No. 5 East coast of North America from Labrador South; (etc.).

See preceding.

1560.

Homin.

See Kohl, Discovery of Maine, 297.

1569.

Mercator. Map of the World. Duisbourg.

Copied in Monuments de la Geographie par M. Jomard, Paris. (Peabody.)

1590 (?).

Hondius, Iodocus. America.

Queer map with many figures. No mention of Marylaud. (U. S. G. S.)

1593.

Judacis, Cornelio. Americae pars Boreales, Florida, Baccalaos, Canada Cortircalis; a Cornelio de Judaeis in lucem edita 1593.

Author's Speculum Orbis terrareum.

"Chesepooc sinus." "Virginia" and "Apalchen" on the map, but with no evidence of the use of White. (Winsor iv, p. 97.)

1596.

Mercator, Michael. America sine India Nova, ad magnae Gerardi Mercatoris aui Vniversalis imitationem in compendium redacta, Per Michaelem Mercatorem, Duysburgensem.

(U. S. G. S.)

1597.

Wytfliet, Cornely. Norvmbega et Virginia 1597.

Wytfliet's Descriptionis Ptolemaicae augmentum. fol. Lovanii, 1597.

"The map differs only in delineation from With's map, but extends farther north, taking in the coast as far as Cape Breton." (Phillips.)

1599.

Hakluyt, Richard. The Principal Navigations.

Nordenskiold's Facsimile Atlas, Stockholm, 1889. (Peabody.)

1608.

Smith, John. Chart of Virginia.

Published in 1812 (?). Quoted in 1813 by Purchas.

"Not drawn on exact scale; it seems to have been drawn on the basis of about five miles, or say one and a half leagues to an inch." (Phillips.)

1612.

Smith, John. A Mappe of Virginia. Oxford 1812.

With explanatory text. See 1624 and 1884.

1622.

De Witt, Fredericum. Novissima et Accuratissima Descriptio, multis Locis recentibus, acta et correcté divisa in Runneo Partes Hodiemas per Fredericum de Witt, Amstelodami, Cum Privilegio D. D. Ordinum. Holl. Westfrisiae.

19x22¾, colored, figures. (Peabody.)

De Wit, F. Novissima et Accuratissima Totius Americae Descriptio per F. de Wit, Amstelodami.

19x22¾, colored. (U. S. G. S.)

1624.

SMITH, JOHN. Virginia.

A Generall Historie of Virginia, New England and the Summer Isles.

1630.

HONDIJ, HENRICI. Virginiae Item et Floridae Americae Provinciarum, nova Descriptio.

Mercator's Atlas, edit. x, by Henrici Hondij.

19x13⅜, figures. Scale, "medius Meridianus est 300, reliqui ad hunc inclinantur pro ratione 30 & 70 parallelorem." "Apalatcy Montes Auriferi" Chesepioock Sinus." (Peabody.)

——— Septentrio America.

Atlas sive Cosmographicae (etc.), edit. x, Girardi Mercatoris pub., by Henry Hondy. Amsterodami, An. D. 1630.

19½x14¾, symbols and curious distortion. (Peabody.)

1632.

CHAMPLAIN. Carte de la nouvelle france.

16x6 (Winsor fascimile), scale irregular, about 200 miles to an inch along Chesapeake Bay. (Winsor iv, p. 387.)

1635.

BLEAU, J. & W. Nova Virginia tabula.

Tweede Del van't Tvourneel des Aerdrucx, Ofte Nievwe atlas uytgegeven Door Wilhelm; en Iohannem Bleau. Amsterdam, 1635.

14½x18½, hand-colored, symbols. Scale about 12 miles to an inch. (Amer. Geog. Soc., Harvard.)

HERMANN, AUGUST. Noua Terrae Marie tabula.

A Relation of Maryland; Together with a Map of the Country. The Conditions of Plantations, etc. London, 1635.

See 1865, 1873. For full title see bibliography.

1638.

KLING, MONS. (Map of Delaware.) (Winsor.)

1639.

VINGBOONS, JOAN. Pascaert van Nieuw Nederlandt, Virginia, ende Nieuw Engelandt, verthonende alles wat van die Landen by see oft by land is ondect oft bekent. (Routier de la Nouv. Néerlande, Virginie et Nouv. Angleterre etc.)

Carte manuscrite. (Phillips.)

——— (?) Pas Caerte van Nieu Nederlandt en de Englische Virginies van Cabo Cod tot Cabo Canvick.

20⅝x16¾, outline, drainage. Scale 25 miles to an inch. (Lenox.)

——— Carte manuscrite du Potomac de la baie jusqu'à Beremotho Citie. (Phillips).

1642.

Doucker, H. Pas Caert van Nieu Nederland, Virginia en Nieu Engelant, nieulyex uytgegeven y' Amsterdam, By Hendrich Doucker.

17⅜x21¼. Outline, drainage. Scale imperfect. (Same map seen under title Virginia, Nieu Nederlant.) (Amer. Geog. Soc.)

1650 (?).

Visscher, Nicolas. Nova Tabula Geographica complectus Borealiorem Americae Partem, [etc.] [Title also in French].

35x21¾, boundaries colored, symbols. Bay carefully drawn. Potomac heads in lake in Pa. Scale 18 miles to an inch. (Lenox.)

1651.

Farrer, Virginia. A mapp of Virginia discouered to ye Hills, and in it's Latt: From 35 deg: & ½ neer Florida, to 41 deg: bounds of New Englands. John Goddard sculp. Domina Virginia Farrer Collegit. Are sold by I. Stephenson at ye Sunn below Ludgate: 1651.

(Repub. in Winsor iii, p. 465.)

1654 (?).

Moll, H. A New Map of the World According to Wright's alias Mercator's Projection, &c. Improved by Richard Monit and Tho. Page., H. Moll facit.

37x23, outline, drainage. Scale 10 miles to an inch. (Peabody.)

1656.

Sanson, N. Le Canada, ou Nouvelle France &c., (etc.), Par N. Sanson d'Abbeville. Geographe ordinaire du Roi. A Paris. 1656.

21⅜x15¾, colored boundaries. "Virginie" includes Maryland territory. (Lenox.)

1657.

Janson, John. Belgii Nove, Angliae novae et Partis Virginiae novissima Delineatio.

Atlantis Pars quarta in qua Asia, Africa, America et Orbis anlequies. Amstelodami, apud Ioannem Ianssonium, 1657. Amsterdami, ex-officina Henrici Hondii.

20x17½. symbols. Scale 8½ German miles to an inch. (Amer. Geog. Soc.)

——— America Septentrionalis. Amstelodami, excudet Ioannes Ianssonius.

Idem.

21½x18½, symbols. Scale about 200 miles to an inch. (Amer. Geog. Soc.)

——— Nova Virginiae tabula.

Idem.

19x15, copied from Smith. (Amer. Geog. Soc.)

1660.

Crexius, Pere du.

Historiae Canadensis, sev Novae Franciae, libri decem, Paris. 1664. pp. xxvi, 810, 4to map and thirteen plates.

See Winsor iv, p. 388.

1661.

Visscher, Nich. John. Novi Belge, Novae Angliae, nec non partes Virginiae Tabula. Van Nich., John Visscher. Amsterdam. 1659.

(Winsor.)

1663.

Colom, Jacob. (Virginia Nieu-Nederlant).

Atlas of Wekelts-water-deel En desselfs Zee-Custen. Amsterdam. 1663.

21x14¾, coast outlined. Scale about 9 miles to an inch. Maryland included under Virginia. (Amer. Geog. Soc.)

1666.

Alsop, George. A Land-skip of the Province of Mary-land or the Lord Baltmors Plantation neere Virginia, By Geo: Alsop Gent:.

Outline of bay, figures, symbols. 6⅝x5 in Gowan.

Octavo edit. (Peabody.)

1669.

Goos, Peter. Pascaerte Van Westindien de Vaste Kusten En de Eylanden.

De Zee Atlas ofte Water Wereld (etc.), by Pieter Goos. 1669.

Looks like With's old map. (Amer. Geog. Soc.)

1669 (?).

Sanson, Nicolas. Atlantis insula.

(Winsor.)

1671.

BLOME, RICHARD. A Draught of the Sea Coast and Rivers, of Virginia, Maryland, and New England. Taken from the latest surveys. London. Printed for Ric Blome.

7x9, outline, with a few mountains. Same map without Calvert arms and dedication to Lord Baltimore in French edition, which bears a French title. (Boston Public Library.)

OGILBY, JOHN. *Terrae Mariae* Noua *et* Virginiae Tabula (after Smith, but different figures).

America, by John Ogilby, p. 182.

15¾x11¼, outline, mountain figures. Scale 6½ sea leagues to an inch. Words italicized were in ink in Peabody copy. (Peabody.)

——— Novissima et Accuratissima Totius Americae Descriptio per Johanem Ogiluium.

In America, by John Ogilby.

17x21, figures and mountains hachured. (Peabody.)

——— Novi Belgii Quod nunc Novi Jorck vocatur, Novae Angliae & Partis Virginiae. Accuratissima et Novissima Delineatio.

America, by John Ogilby. London, 1671, p. 168.

14¼x11¼, outline, drainage, figures, mountain hachured. Scale about 65 miles to an inch. (⅞ in. Ger. mile.) (Peabody.)

——— Virginiae, partis australis et Floridae, partis orientalis, ... nova descriptio. Amsterdam Montanus.

America, by John Ogilby. London, 1671, p. 212. (Lenox.)

1673.

HERMAN, AUGUST. Virginia and Maryland As it is Planted and Inhabited this present Year 1670.

Outline, drainage, symbols. Scale 12 Eng. miles to an inch.

This contains the names of eight counties and many rivers quaintly spelled. (Md. Hist. Soc. Photolith.; also reprod. by Boundary Com., 1873.)

1675.

ROGGEVEEN, ARENT. "Pascaert vande Virginies Van Baija de la Magdelena tot de Zuijdt Revier" (Delaware river).

Het eerste deel von het Brandende Veen, verlichtende geheel West-Indien (etc.). fol. A'Amsterdam, 1675. (Phillips.)

SELLAR, JOHN. A chart of the sea coasts of New England, New Jarsey, Virginia, Maryland and Carolina, C. Cod to C. Hatteras.

His Atlas maritinius. London, 1675. (Phillips.)

1676.

Speed, John. A map of Virginia and Maryland.

The Theatre of the Empire of Great Britain, presenting an exact geography of the Kingdom of England (etc., etc.), together with a Prospect of the most famous Parts of the World, viz. Asia, Africa, Europe, America. London: printed for Thos. Bassett, 1676. Fol.

14¾x19½, symbols. (Lenox and Amer. Geog. Soc.)

1679.

Daniel, R. A new map of the English Empire in America, viz: New England, New York, New Jersey, Maryland, Virginia, with an accurate description of those Countries. London (?) 1679 (Phillips).

1687.

Morden, Robt. A New Map of Virginia, Maryland. Pensilvania. New Yarsey.

The Present State of His Majesties Isles and Territories in America. London, 1687, p. 182.

4x5, black and white. Scale about 70 miles to an inch. (Boston Public Library.)

1690 (?).

Anon. 't Noorder Gedeelte van Virginie door Bartholomeus Gosnol en Martin Pringe, ugt Engeland bevaaren.

8½x11¼, colored. Scale 110 German miles to an inch. Virginia extends to New Hampshire, no Md. (U. S. G. S.)

1690.

Coronelli, Vincenzo. America settentrionale colle Neune Scoperte fin all 'Anno 1688 dal P Mrô Coronelli M. C.

Corso Geographico Universale, Vincenzo Coronelli M. C. Parte Seconda No. 51. In Venetia MDCXC.

34x23, symbols. Scale about 170 miles to an inch. (Amer. Geog. Soc.)

Van Noort, Olivier. Dry-Jaarige Scheep-togt der Niederlanders ouder Olivier van Noort door de Straat Magellaan om dem Gantsen.

Andkloot gedaan-public por pierre Vander Aa à Leide.

9x6, colored. Scale approximately 7 miles to an inch. Chesapeake reaches almost to the St. Lawrence. Little or no Eastern Shore. (U. S. G. S.)

1695 (?).

Binneman, W. A map of ye Continent of America; viz: Virginia, Maryland, Carolina, New York, (etc). W. Binneman sculpsit. Sold by R. Morden. London. (Phillips).

THORNTON, JOHN, and FISHER, WILL. A map of Virginia, Maryland, Pennsylvania, and East and West New Jersey, by John Thornton, at the Plott in the Minories, and by Will Fisher, at ye Postern Gate, on Tower Hill, London. Same French edition, Amsterdam.
Scale one inch to 9.18 miles. (Jones, Williams, Md. Hist. Soc.)

1698.

THOMAS, GABRIEL. Pennsylvania and West Jersey.
Historical description of the Province and Country of West New Jersey in America (etc.), with maps.
See Winsor, 1884.

1700 (?).

SANSON, N. Carte nouvelle de l'Amérique Angloise, contenant la Virginie, Maryland, Caroline, Pensylvanie, Nouvelle Iorck, N: Iarsey, N: France, et les terres nouvellement decouverte dressée sur les relatione les plus nouvelles. Par le sieur S. Amsterdam. P. Mortier.
(Phillips.)

——— Carte particuliere de Virginie, Maryland, Pennsilvanie, la Nouvelle Jarsey Orient et Occidentale. P. Mortier, Amsterdam.
(Phillips.)

"An ancient map of the Province of Maryland on Vellum colored."
Mentioned in Maryland charts in the Public Record Office, Nation, vol. lv, 1892, p. 471.

1702.

CAMPANIUS, JOHAN. Virginia N. Angliae, N. Hollandiae nec non Novae Svcciae Delineatio.
Campanius Nya Swerige.
See Winsor, Nar. Crit. Hist., vol. iv, p. 485.

1705.

HARRIS, JOHN. America (north and south).
Navigautium atque Itinerantium Bibliotheca, or A Compleat Collection of Voyages and Travels. London MDCCV.
16½x14, outline, drainage, mountains hachured. (Peabody.)

1708.

MOLL, H. A new map of Virginia and Maryland.
Oldmixon, (John). The british empire in America, 12°, London for J. Nicholson, 1708, vi, p. 209.
7x10, outlines, drainage. Scale, 22 miles to an inch. (Peabody.)

——— Map of North America according to ye Newest and most Exact observations (etc) dedicated to John Lord Sommers. Printed for I. Bowles (et als). B. Lens. delin. G. Vertue, Sculp.

37x22¼, boundaries colored. Scale about 200 miles to an inch. Maryland extends to Lake Frontinac (Erie). Possibly published 1715. (U. S. G. S., Lenox.)

After 1711.

Anon. Carte Nouvelle de la Mer du Sud, dressée par ordre des Directeures, (etc). Donné au Public par And; and Henry de Leth. à Amsterdam.

36½x27½, colored, illustrated, imperfect scale. Pennsylvania, Maryland and Virginia grouped together. (Lenox.)

1714.

Homann, Ioh. Bapt. Virginia, Marylandia et Carolina in America Septentrionali Britannorum industria excultae repraesentatie a Ioh. Bapt. Homann S. C. M. Geog. Norembergae.

Atlas Noves Terrarum Orbis Novibergae No. 27.

22½x19¼, states colored. Scale 8 German miles to an inch. Md. extends to Hancock. (Amer. Geog. Soc.)

1715.

Moll, Herman. A new and exact map of the dominions of the King of Great Britain on ye Continent of North America. Containing Newfoundland, New Scotland, New England, New York, New Jersey, Pensilvania, Maryland, Virginia and Carolina According to the Newest and most Exact observations by Herman Moll, Geographer, Dedicated to Walter Dowglass. 1715. Printed and sold by Tho. Bowles—London.

40x23¾, colored boundaries, illustrated. Scale about 50 miles to an inch.

Side maps. Maryland extends to Frontignac Lake (Lake Erie). Little except along the Bay. (Lenox.)

1717.

Moll, H. A new map of Virginia and Maryland.

Atlas Geographers; or a compleat System of Geography, 4°, in the Savoy —E. Nutt for J. Nicholson, 1717, vol. v. p. 700.

Reduced copy of Herman's map as originally published in 1708. (Phillips.)

1719.

Senix, J. A new map of Virginia (and) Maryland and Improved parts of Pennsylvana & New Jersey, revised by I. Senix 1719 most humbly Inscribed to the Right Honble the Earl of Orkney &ct.

19¼x22, colored, symbols. Scale 13½ miles to an inch. (Peabody.)

——— A new map of the english empire in America, viz: Virginia, Maryland, Pennsylvania, New York, (etc) Revis'd by I'no Senix 1719. I. Harris sculpt.

A new general atlas (anon.) fol. London, for D. Browne, 1721, facing p. 236. (Phillips.)

1720.

Gosnal, Barth. 'T noorder gedeelte van Virginie door Bartholomeus Gosnal en Martin Pringe uyt Engeland bevaaren.

Uytgevoerd te Leyden door Pieter van der Aa (1720). (Phillips.)

Iaillot, H. America Septentrionale Divesée en Ses Principales Parties Presente a Monseigneur le Duc de Bourgogne par H. Iaillot.

22⅜x18½, symbols. Scale 200 miles to an inch. Maryland not mentioned. Virginia adjoins N. Suede. (U. S. G. S.)

Moll, H. A New Map of the North Parts of America claimed by France under y^e^ Names of Louisiana, Mississippi, Canada and New France with y^e^ adjoining Territories of England and Spain. The Projection of this Map is called Mercator's, And it is laid Down according to the Newest and Most Exact Observation By H. Moll. Geographer 1720. (Dedicated to Thomas Bromsall.)

24x40½, boundaries colored, illustrated. Scale about 85 miles to an inch. Maryland goes only part way to Lake Erie. (Lenox.)

Nolan, I. B. L'Amérique ou le Nouveau Continent.

22x20. Scale about 200 miles to an inch. "Miralana" is not sharply defined. (Lenox.)

1720 (?).

Seale, R. W. A map of North America With the European Settlements & whatever else is remarkable in ye West Indies from the latest observations.

R. W. Seale delin. et sculpt. (n. d.).

14½x18¾, symbols. Small scale. Maryland boundary on the south branch of the Potomac. (U. S. G. S.)

1721.

Senix, John. A New Map of the English Empire in America viz Virginia, Maryland, Carolina, New York, New Iarsey, New England, Pennsylvania, Newfoundland, New France &c. Revised by I'on Senix 1719. Most humbly inscribed to Hewer Edgly Hewer of Clapham Esq.

A new general Atlas. London, for Daniel Brown (etc.), MDCCXXI.

23x19¾, outline, colored, drainage, mountains hachured. Scale 90 miles to an inch. (Peabody.)

1722.

Delisle, Guillaume. Cartes d'Amérique Dressée pour l'Usage du Roy par Guillaume Delisle . . . à Amsterdam chez Jean Cóvens et Corneille Mortier.

Also titled Amerique accuraté in Imperia Regna Status & Populas Divisa, ad Usum Ludovici XV Galliarum Regis.

19¼x23¼, outline colored. Scale about 375 miles to an inch. Maryland represented as extending indefinitely westward and embracing present Delaware. (U. S. G. S.)

——— L'Amérique Septentrionale Dressée sur les Observations de M^rs. de l'Academie Royale des Sciences &c. à Amsterdam chez Pierre Mortier. avec privilege.

In Atlas Novum ad Usum serenissimi Burguveliae Duiss.

22½x17¾, colored. Scale about 100 French leagues to an inch. Maryland bounded on west by Pays des Illinois. (Amer. Geog. Soc.)

——— Carte de la Louisiane et du Cours du Mississippi Dressée sur un grand nombre de Memoires entr'autres sur ceux de M^r le Maire, Par Guill.^me de l'Isle. à Amsterdam chez Jean Cóvens et Corneille Mortier.

23⅝x17, colored, symbols. Scale 3½ inches to 100 French leagues. Maryland bounded on south by Acconachena River, on west by summit of the mountains, on the north by Iroquois, and east by PensilVanie and Delaware Bay. (U. S. G. S.)

——— Carte du Mexique et de la Floride des Terres Angloises et des Isles Antilles (etc). à Amsterdam chez Cóvens et Mortier, 1722.

23x18½. (Lenox.) (U. S. G. S.)

De La Polerie. Carte generalle de la Nouvelle France.

Histoire de L'Amérique Septentrionale.

5x6⅝, outline, drainage, mountains hachured. Scale about 500 miles to an inch. (Peabody.)

Sanson, N. Atlantis Insula a Nicolao Sanson, Amstelodami. I. Cóvens et C. Mortier.

21½x15¼. (U. S. G. S.)

About 1725.

Züneri, A. F. Americae tam Septentrionalis quam Meridionalis in Mappa Geographica Delineatio (etc).

Opera A. F. Züneri, ex officina Petri Schenkii.

22¾x19⅝, colored. Scale about 200 miles to an inch. "miriland" is not definitely bounded. (Lenox.)

1728.

Anon (?). Atlas Maritemis et Commercialis, London 1728.

Contains maps of the Chesapeake and Delaware.

1730.

Delisle. America Accurate in Imperia Regna Status & Populus-Divisa ad Usum Ludovici xv Galliarium Regis. or Carte D'Amérique Dressée pour l'Usage du Roy Par Guillaume Delisle.

23½x18¾. Maryland bounded on north. (Lenox.) Possibly another edition in 1822.

Moll, H. Virginia and Maryland.

10½x9⅞, outline colored. Scale about 18 miles to an inch. Baltimore town at Bush Creek. Small area for Delaware. (U. S. G. S.)

——— New England, New York, New Jersey and Pennsylvania. An account of ye Post of ye Continent of Nth America as they were regulated by ye Postmasters Gen. of ye Post House. No. 49.

10¾x8, colored, symbols. Scale 50 miles to an inch.

Curious winding of the Md. Del. boundary giving the southern limits of "Dellawar" near Cape Henlopen. (U. S. G. S.)

1731.

Homann, Ioh. Bapt. Virginia, Marylandia et Carolina in America Septentrionali Britainorum industria (etc). a Ioh. Bapt. Homann S. C. M. Geog. Noremborga. "Cum privilegio Sae Cas. Magist."

Bound up with something else. Grosser Atlas Nurmburg MDCXXXI. (Amer. Geog. Soc.)

Luillier, J. l'Amérique Meridionale et Septentrionale Dressée sur les Nouv^{les} Descouv.^{tes} (etc) published by Sr. Guill e Danet. Paris 1731.

Roughly drawn. (Lenox.)

Sillverling, Jonas (sculpt). Delineatio Pennsilvaniae et Caesareae Nov-Occident SeuWest N. Iersey in America.

7x10⅛ symbols. Scale 22 miles to an inch (reprod.?). (Lenox.)

1732.

Popple, Henry. Map of the British Empire in America, with the French and Spanish Settlements adjacent thereto.

Twenty sheets 19 x 27. Colored. (Winsor.) See 1733.

Anon. Lord Baltimore's Map.

Printed by B. Franklin, Phila., 1732 (?). (Williams.)

1733.

Haxton, Walter. A Merchants chart of the Chesapeake.

"To the merchants of London trading to Virginia and Maryland this mapp of the Chesapeake with the rivers Potomoch, Patapsco and part of Chester is dedicated." (Md. Hist. Soc.)

Popple, Henry. A Map of the British Empire in America with the French and Spanish Settlements adjacent thereto (London 1733).

(An index map to the twenty sheet map.)

19⅛x19⅝, colored or uncolored. Scale about 200 miles to an inch. (Peabody.)

——— A Map of the British Empire in America with the French and Spanish settlements adjacent thereto by Henry Popple.

20 sheets 19x27. Scale not given.

Same base, colored or uncolored. One edition was sold by S. Hardig, etc. (Peabody.)

1735.

Haxton, Walter. To the Merchants of London Trading to Virginia and Maryland This mapp of the Bay of Chesapeack with the Rivers Potomack, Patapsco North East and part of Chester, Is humbly dedicated & Presented by Walter Haxton 1735.

56x36, outline. (Peabody.)

Senex, John. A map of Virginia, according to Capt. Iohn Smith's map published anno 1606 Also Of the Adjacent country called by the Dutch Niew Nederlant, anno 1630, by Iohn Senex, 1735.

(Winsor.)

——— Maryland according to the bounds mentioned in the charter and also of the adjacent country, anno 1630, London 1735.

(Probably same as preceding.) (Winsor.)

1736.

Moll, H. Virginia and Maryland.

Atlas minor obl. fol. London for T. Bowles and J. Bowles, 1736, No. 50.

A reduced copy of Herman's Map. See 1708 and 1717. (Phillips.)

1737.

[Byrd, Wm., et als.] A Survey of the Northern Neck of Virginia, etc. with the Courses of the Rivers Rappahannock and Potowmack in Virginia as surveyed according to Order in the Years 1736 & 1737.

11⅝x13¾, outlines. Scale 14 miles to an inch. Course of Potomac. St. Mary's to head. See Lewis, 1745. (Lenox.)

——— The courses of the Rivers Rappahannock and Potowmack in Virginia, as surveyed according to order in the years 1736-1737.

12x14 inches. See Wm. Byrd. History of the dividing line. Gives S. shore of Maryland. Same as preceding, but different title. (Peabody.)

1738.

Anon. A new map of Virginia, humbly dedicated to Thomas Lord Fairfax 1738.

13x8½, facsimile Winsor Narrative and Crit. Hist., iv. p. 275.

1740.

Anon. A map of Parts of the Provinces of Pennsylvania and Maryland, with the counties of New Castle, Kent, and Sussex in Delaware according to the most exact surveys yet made, drawn in the year 1740. London. (Chancery Proc.)

Pub. sep. (Winsor.)

Bakewell, Tho. America, a new and most exact Map laid down according to the observations communicated to the English Royal Society, the French Royal Academy of Sciences, (etc.) Printed and sold by Tho. Bakewell.

23⅜x19⅜, boundaries colored. Poor drawing of Chesapeake. (U. S. G. S.)

1741.

Echard, Lawrence. Gazetteer, or Newmans Interpreter, being a geographical Index of all the Empires, Kingdoms, Islands etc, in Africa, Asia and America. London. 1741.

"New York is made to join Maryland." (Winsor Nar. and Crit. Hist., vol. iv, p. 235.)

1745.

Lewis, Thos. A survey of the Northern Neck of Virginia, being the lands belonging to the Rt. Honourable Thomas Lord Fairfax, Baron Cameron, bounded by and within the Bay of Chesapoyocke, and between the Rivers Rappahannock and Potowmack.

Facsimile in Winsor's Nar. and Crit. Hist., vol. iv, p. 277, probably a corrected copy of Byrd's 1737, as they were both of the same commission.

Pt. Tobacco to Pt. Lookout is equal to 3 inches. See 1737. (Amer. Geog. Soc.)

1746.

D'Anville. Amérique Septentrionale Publiée sous les auspices de Monseigneur le Duc d'Orleans—Prémier Prince du Sang. Par le Sr. d'Anville. MDCCXLVI, avec privilege.

Theatre du Monde a Paris chez le Sr. Julien.

32⅝x34, hachured, drainage. Scale 100 miles to an inch. (Peabody.)

1747.

Bowen, Eman. A new and accurate map of Virginia & Maryland. Laid down from surveys and regulated by astron'l Observat'ns.

A complete system of geography. fol. London, for W. Inns, 1747, vol. ii, p. 647. (Phillips.)

1750.

Garvin. A map of Virginia and Maryland.

London, 1750. (Phillips.)

Vaugondy, Robert de. Amérique Septentrionale dressée sur les Relations les plus modernes des Voyageurs et Navigateurs, et divisée suivant les differentes possessions des Européens. Par le Sr. Robert de Vaugondy, fils de Mr. Robert, Géographe ordin. du Roy. avec Privilege: 1750.

23x18¾, colored. Scale 240 miles to an inch.

Maryland embraces Delaware. (U. S. G. S.) (Lenox.)

1751.

Fry, Joshua, and Jefferson, Peter. Map of the " most " (written in on Lenox copy) Inhabited Part of Virginia, containing the whole Province of Maryland, with Parts of Pensilvania, New Jersey and North Carolina. Drawn by Joshua Fry and Peter Jefferson in 1751. Engraved by Th. Jeffrys. London 1751. 4 sheets.

30x48, boundaries colored, mountains hachured, symbol. Scale 10½ miles to an inch. (Lenox.)

French edition, 1755.

1752.

Bowen, Eman. A new and accurate map of Virginia & Maryland. Laid down from Surveys and regulated by Astron'l Observat'ns.

A Complete atlas. fol. London, for W. Innys, 1752, No. 59.

(Same as Bowen, 1747). (Phillips.)

Buache. Carte des Terres nouvellement connues au Nord de la Mer du Sud tant du Côte de l'Asie du Côte de l'Amérique.

(Winsor.)

Guittard, (Jean Etienne). Carte Minéralogique où l'on voit la nature des terrains du Canada et de la Louisiane. (made by Buache).

Accompanying " Mémoire dans lequel on compare la Canada à la Suisse par rapport à ses mineraux." Histoire de l'Académie Royale des Science. 4°. Paris, 1752, p. 189, plate vii. (Marcou.)

1754.

Cresap, Thos. (?) Original MS. map of the course of the Potomac.

(Reprod.) Md. Hist. Soc. Fund Pub. No. 29, appendix D.

1755.

D'Anville, Sr. Canada, Louisiane et Terres Angloises par le Sr. d'Anville Novembre MDCCLV sous le privilege de l'Académie.

Theatre du Monde, Paris, chez St. Julien.

44½x34¼, outline, drainage, mountains hachured. Scale about 45 miles to an inch. (Peabody.)

———Canada, Louisiane et Terres Angloises Novembre MDCCLV 2 sheets In Atlas du Sr D'Anville.

25x15¾, for the sheet containing Maryland, mountains hachured. Scale 50 miles to an inch. (Amer. Geog. Soc.)

——— North America From the French of Mr. D'Anville Improved with the Back Settlements of Virginia and Course of Ohio illustrated with Geographical and Historical remarks.

Pub. by Thos. Jefferys, London, 1755.

20x18. Scale about 105 miles to an inch. Maryland as at present outlined. (Lenox.)

Baldwin, R. A map of Virginia, north and south Carolina, Georgia, Maryland, with a part of New Jersey (etc.). London 1755. (Phillips.)

Dalrymple, J. A map of Northern Virginia, Delaware, New Jersey, Southern Pennsylvania and Maryland. London Jan. 1, 1755.

"From information collected on the spot and entered in his journal." 2 folio sheets, colored. (Md. Hist. Soc.)

Evans, Lewis. A general map of the middle british colonies in America viz: Virginia, Mariland, Delaware, Pensilvania (etc).

Evans' geographical, historical, political, philosophical and mechanical essays. 4°. Phila.: B. Franklin & D. Hall, 1755.

27½x20½, sometimes colored, reprinted in London, 1756 and 1771. (Peabody?)

Fry, Josue et Jefferson, Pierre. Carte de la Virginie et du Maryland, Dressée sur la grande carte Angloise de Mrs. Josue Fry et Pierre Jefferson. Par le Sr. Robert de Vangondy. Géographe ordinaire du Roi. 1755.

Atlas Universal (Grand Vangondy). fol. Paris, 1757.

19x25, colored, coast and bay creeks. Scale 12 miles to an inch. Baltimore on Bush river. Six counties named. (Lenox.)

Huske, John. A new and accurate map of North America (wherein the errors of all preceding British, French, and Dutch maps respecting the rights of Great Britain, France and Spain and the limits of each of His Majesty's Provinces are corrected) by Huske, London. 1755.

Present state of North America, 2nd edit., London, 1755.

This is small in scale, but shows Maryland bounded as at present with Virginia, Pennsylvania, North Carolina, Georgia and South Carolina, extending indefinitely westward. (Winsor.)

Mitchell, John. A map of the British Colonies in North America, with the roads, distances, limits and extent of the settlements. Six sheets. London 1755.

(Winsor, Nar. and Crit. Hist., iv, p. 83.)

Mitchill, Jno. A Map of the British and French Dominions in North America with the Roads, Distances, Limits, and Extent of the Settlements. [etc.] London 1755.

Six sheets, was originally drawn in 1750 and then revised. (Reprod. 1873.) (Boston Public Library.)

Society of Anti-Gallicans. A new and accurate map of the English Empire in North America, representing their Rightful claim, as confirmed by charters and the formal Surrender of their Indian Friends, likewise the Encroachments of the French. London 1755.

See Winsor, Nar. and Crit. Hist., iv, p. 235.

De Vaugondy, Robert. Partie de l'Amérique Septentrionale qui comprend le Cours de l'Ohio, la N'lle Angleterre, la N'lle York, le New Jersey, la Pensylvania, le Maryland, la Virginie, la Caroline.

23½x18¾. Scale about 35 miles to an inch.

Maryland extends about to Cumberland. (Lenox.) (U. S. G. S.)

1756.

Anon. An exact Platt of Baltimore Town in Baltimore County, Md.

(Md. Hist. Soc.)

Evans, Lewis. A general map (etc.), see 1755.

1757.

Anon. Carte de la Virginie de la baye de Chesapeack et pays voisins, pour servir à l'historie générale des voyages. (Phillips.)

Anon. L'Amérique Septentrionale Dressée sur les Mémoires le plus récens des meilleurs Geographes & publiée par Cóvens & Mortier à Amsterdam.

23½x18, symbols. (U. S. G. S.)

D'Anville. L'Amérique Septentrionale, Dressée sur les Mémoires le plus récens des meilleurs Geographes & publiée par Cóvens & Mortier à Amsterdam MDCCLVII, atlas Homannianus.

Amsterdam MDCCLVII, atlas Homannianus.

23½x18. (Amer. Geog. Soc.)

Popple, Henry. A Map of the British Empire in America with the French, Spanish and the Dutch Settlements adjacent thereto by Henry Popple. Printed at Amsterdam for I. Cóvens and C. Mortier. (Certified to by Edm. Halleij.)

18½x19⅜, drainage, mountains hachured. Illustrated. Maryland not separated from Pennsylvania. (U. S. G. S.)

1758.

Anon. Carte de la Louisiane, Maryland, Virginie Caroline, Georgie, avec Partie de la Floride a Amsterdam chez Cóvens & Mortier 1758. (C. Lepp scult).

23⅛x15½, boundary colored, mountains hachured. Scale about 33 miles to an inch. (Lenox.)

Anon. Carte de la Louisiane, Maryland, Virginie, Caroline, Jarsey. Sold by William Mount & Thos. Page. Tower Hill.

The English Pilot, fourth book fol. London, 1758, facing p. 23.

"Hermann's map, with some alterations," 20x31. (Amer. Geog. Soc.)

Anon. Karte von der bay Chesapeack und den benach barten landen.

Allgemeine historie der reisen zu wasser und lande. 4°. Leipsig: Arkstie & Merkus, 1758, vol. xvi. p. 538.

Same map in the French edition "Histoire générale des voyages." 7½x11. (Phillips.,

Evans, Lewis (and I. Gibson). A general map of the middle british colonies in America, viz Virginia, Maryland, Delaware (etc) Carefully copied from the original published at Philadelphia by Mr. Lewis Evans 1755 with some improvements by I. Gibson. (London 1758) (Phillips).

Evans, Lewis (and Thos. Jeffrys). A general map of the middle british colonies in America viz. Virginia, Maryland, Delaware (etc) By Lewis Evans. Corrected and improved by Thos. Jeffreys. London. R. Sayer & T. Jeffrys 1758.

A general topography of North America and the West Indies, 1768, No. 32. (Phillips.)

1759.

Homann, Ioh. Bapt. Virginia, Marylandia et Carolina in America Septentrionali Britannorum industria excultae repraesentatae a Ioh. Bapt. Homann S. CM. Geog. Norumbergae.

Atlas geographicus maior fol. Norumbergae curantibus Homannianis heredibus, 1759.

1760.

Anon. Indenture of Agreement, 4th. July, 1760, Between Lord Baltimore and Thomas and Richard Penn Esquires, settling the limits and boundaries of Maryland, Pennsylvania, and the Three Lower Counties of New Castle, Kent, and Sussex. Phila. 1851 (?) folio 31 pp. and maps. Printed privately for Edward D. Ingraham.

Winsor Nar. and Crit. Hist. iii, p. 514.

Anon. A new and accurate Map of the Province of Virginia in North America. (after Fry?)

13x11, outline, drainage, mountains hachured. Scale about 20 miles to an inch. Curious boundary of Maryland. (U. S. G. S.)

Anon. A new map of the Province of Maryland in North America.

Gives Maryland boundary on south branch of Potomac (same source as one of Virginia). 13x11¾.

D'Anville (and Thomas Jeffrys). North America, from the french of Mr. D'Anville, Improved with the back settlements of Virginia and course of Ohio. Illustrated with geographical and historical remarks.

The natural and civil history of the French dominion in North and South America, by Thos. Jefferys, fol. London, 1760, facing p. 134. (Phillips.)

1760.

Bowen, E. A new and accurate Chart of the West Indies with the Adjacent Coasts of North and South America by Eman. Bowen.

14x17½, outline, drainage, etc. 1740 on the map. (U. S. G. S.)

——— A map of the British American Plantations, extending from Boston in New England to Georgia, including all the back settlements in the respective Provinces as far as the Mississipi.

11x9¾. Scale 100 miles to an inch. Maryland embraces Delaware and extends to Lake Erie. (U. S. G. S.)

1760 (?).

Kitchin, T. North America, Drawn from the Best Authorities by T. Kitchin.

8¾x7½. (U. S. G. S.)

1762 (?).

Anon. Mar del Nort.

21x16¾. A curious distribution of provinces, Maryland and Pennsylvania not mentioned. (U. S. G. S.)

1762.

Anon. Carte de la Virginia, Maryland, etc., tirées des meilleures cartes angloises (Bellin, Paris 1762) (Phillips).

1763.

Anon. A new & Accurate Map of North America Including the British Acquisitions gained By the late War. 1763.

9x7½, outlines. Scale about 200 miles to an inch, Maryland not bounded. (Lenox.)

Anon. An Accurate Map of the British Empire in Nth-America as settled by the Preliminaries in 1762. J. Gibson Sculp.

Gent. Mag., 1763 (?).

9½x8¼, political area shaded. Scale 250 miles to an inch. (U. S. G. S.)

Bowen, E. Accurate map of N. America after the Treaty of Paris. (Williams.)

1767 (?).

Mason and Dixon.

(Williams, Md. Hist. Soc.)

1767.

(Hermann, A.) Virginia, Maryland, Pennsylvania East and West New Jarsey. Dublin. Sold by Geo. Grierson at the Two Bibles in Essex Street.

The English Pilot. The fourth book fol. Dublin: B. Grierson, 1767, after p. 24.

Same map in London ed., 1758, Hermann's map. (Phillips.)

1768.

Fry, Joshua & Jefferson, Peter. A map of the most inhabited part of Virginia containing the whole province of Maryland etc.

A general topography of North America and the West Indies. fol. London, for R. Sayer and T. Jeffery, 1768, Nos. 54-57. (Williams) (Winsor) (Phillips).

1770.

Anon. Accompanying (Report on Canals and Roads).

Trans. Amer. Phil. Soc., Phila., n. s. vol. i, 1770.

Outline of river courses and surveyed distances. Scale about 7 miles to an inch.

1772.

(D'Anville.) A map of the whole continent of America divided into North and South and West Indies with a Copious Table (etc). Compiled from Mr. D'Anvilles maps of that continent 1772. London pub. by Robt. Sayer. Apr. 1772.

41x46, mountains hachured, symbols. Maryland stops at Hancock. (Lenox.)

1774.

Dunn, Sam'l. North America as Divided amongst the European Powers By Samuel Dunn, Mathematician. London Robt. Sayer. 1774.

17½x12. Shows Maryland extending west to present limits. (Lenox.)

1775.

Fry, Joshua & Jefferson, Peter. A Map of the most Inhabited part of Virginia containing the whole Province of Maryland with Parts of Pensilvania, New Jersey and North Carolina. Drawn by Joshua Fry & Peter Jefferson in 1775.

Dedicated to the Earl of Halifax, (et als.)

The American Atlas. London, 1778, Sayer & Bennett.

50x31 hachured. Scale nearly 10 miles to an inch. Maryland practically all of Delaware and north of Lancaster, Pa. No western boundary drawn to state, but "Lord Fairfax his boundary line" is given. (Amer. Geog. Soc.)

Evans, Lewis (and Jeffrys, Thos.). A general Map of the Middle British Colonies in America, viz., Virginia, Maryland, Delaware, Pensilvania, New Jersey, New York, Connecticut and Rhode Island (etc.)

Published by Lewis Evans, Phila., corrected and improved with additions by Thos. Jefferys. In American Atlas, by Thos. Jefferys, No. 18, London, 1755. Sold by R. Sayer in Fleet Street, and T. Jefferys, Charing Cross.

26¼x19, colored, symbols. Scale 36 miles to an inch.

Baltimore in present location, western boundary uncertain. (Peabody.)

Lodge, Jno. A map of the American indian nations, adjoining Mississippi, West and East Florida, Georgia, S. & N. Carolina, Virginia &c. Jno. Lodge sculp.

The history of the American Indians, by James Adair. 4°. London, for Edward and Chas. Dilley, 1775.

12¾x9½, outline, drainage, mountains hachured. Scale about 52 miles to an inch. (Peabody.)

1776.

Anon. The Theatre of War in North America with the Roads, and Tables, of the Superficial Contents, Distances, &ca. By an American. London. 1776.

15¾x19½, hachured. Scale about 100 miles to an inch. (Boston Public Library.)

Pownall, I. Topographical description of such parts of North America as are contained in the (annexed) map of the British middle colonies, (etc.), in North America. London, 1776. (J. Almon).

Based on Evans' map (1775).

(See other reference.) (Williams.)

——— General map of Middle British Colonies in America containing Virginia, Maryland, the Delaware counties, Pennsylvania and New Jersey. (etc) corrected from Gov. Pownall's late map 1776. London for R. Sayer & J. Bennett 15 Oct. 1776.

The American military pocket atlas. 8°.

25x19, boundaries, colored. Scale 35 miles to an inch. Western boundary a little different from that at present. (Lenox.)

Smith, Anthony. A New and Accurate Chart of the Bay of Chesapeake with all the Shoals, Channels, Islands, Entrances, Soundings and Sailors marks, as far as the Navigable Part of the Rivers Potowmack, Patapsco and North East. Drawn from several Draughts made by the most experienced navigators, chiefly from those of Anthony Smith, Pilot of St. Mary's.

38x54, colored, symbols. Scale 3½ miles to an inch. Baltimore on Bush river. (Lenox.)

1777.

Faden, Wm. The British Colonies in North America. Engraved by William Faden, MDCCLXXVII.

The North American Atlas. London. Printed for William Faden, 1777. (Lenox.)

1777.

Kitchin, Sen. Thos. Seat of War in the Environs of Philadelphia. London Magazine 1777.

10x7½, outlines. Scale 10 miles to an inch. Map includes Cecil county. (Lenox or Amer. Geog. Soc.)

1778.

Churchman, J. "To the American Philosophical Society This Map of the Peninsula Between Delaware & Chesapeake Bay with the said Bays and Shores adjacent drawn from the most accurate Surveys is inscribed by John Churchman." Published without place or date. (Phillips.)

Hutchins, Thos. A New map of the western parts of Virginia, Pennsylvania, Maryland and North Carolina; (etc) by Thos. Hutchins.

44½x35½, symbols. Scale 20 miles to an inch. Gives Maryland west of Williams Ferry. (Amer. Geog. Soc.)

Le Rouge, Geo. L. Virginie, Maryland en 2 feuilles par Fry et Jefferson. Traduit, corregé, augmenté.

Atlas Amériquain Septentrional. fol. Paris, Le Rouge 1778-(1792?), No. 16. (Phillips.)

Russell, Wm. An Exact Map of New Jersey, Pensylvania, New York, Maryland & Virginia from the latest Surveys.

The History of America, by Wm. Russell. 4°. London, 1778, vol. ii, p. 267.

9¾x7⅜, outlines, mountains hachured. Scale about 38 miles to an inch.

(Possible modified reproduction of Fry & Jefferson.) (Lenox.)

Sartine (?). Carte reduite des côtes orientales de l'Amérique Septentrionale, contenant partie due Nouveau Jersey, la Pensylvanie, le Mary-land, la Virginia, la Caroline Septentrionale, la Caroline Méridionale et la Georgie, (etc). Dressée au dépôt général des cartes, plans et journax de la marine. Par ordre de M. de Sartine 1778.

Hydrographie françoise, par Jacques Nicolas Bellin. fol. Paris, 1737-1778, vol. ii. (Phillips.)

Smith, A. Carte de la baie de Chesapeake et de la partie navigable des rivières James, York, Patowmack, Patuxent, Patapsco, North-East, Choptant et Pokomack. Redigée pour le service des vaissance du roi, par ordre de M. de Sartine d'apres des plans anglois et particulierement ceux d'Antoine Smith, 1778.

(See also Smith, 1776, 1794, etc.) (Phillips.)

1775-1780.

Anon. Part of North America comprehending The course of the Ohio, New England, New York, New Jersey, Pennsylvania, Maryland, Virginia, Carolina & Georgia.

11⅝x8½, outlines (reproduction with reduction (?) of an earlier map. Lenox).

1780 (?).

Couder, Thos. North America agreeable to the Most approved maps and Charts by Thos. Couder.

13x14¾, outlines. Small scale. (Lenox.)

1780.

Lodge, Jno. A new and accurate map of Virginia and part of Maryland and Pennsylvania.

The Political Magazine. 8°. London, for J. Bew, 31 Dec., 1780, p. 787. (Phillips.)

Presbury, G. G. Plan of Baltimore (MS).

25x17, outline of small area about Baltimore and Calvert streets. "Scale of twelve miles in one inch." (Md. Hist. Soc.)

1781.

Hutchins, Thos. Partie occidentale de la Virginie, Pensylvania, Maryland, et Carolin Sept'le la rivière d'Ohio (etc). Par Hutchins capitaine anglais Paris, le Rouge, 1781. (Eng. edit. 1778.)

19x23. (Phillips.)

1782.

Hilliard. Carte de la Virginia, du Maryland et de l'état de Delaware.

Essais historiques et politique sur les Anglo-Americans, par Michel René Hilliard d'Aubertenil. Gravures et cartes. 4°. Bruxelles, 1782, pl. v. (Phillips.)

1783.

Pownall. A new map of North America, with the West India Islands, divided according to the Preliminary Articles of Peace, signed at Versailles 20 Jan. 1783. Laid down according to the Latest Surveys and corrected from the Original Materials of Governor Pownall. Mem^{br} of Parlia^{mt} 1783.

46x40, on two sheets, colored. Scale 75 miles to an inch. Maryland distorted too short east and west. Published 1786.

1784.

Faden, Wm. The United States of North America: with the British Territories, and those of Spain, according to the Treaty of 1784. Engraved by Wm. Faden, 1793.

27x28, hachured. Scale about 100 miles to an inch. (Boston Public Library.)

Lattré. Carte des Etats-Unis de l'Amerique suivant le Traité de Paix de 1783 Dédiée et Presentée a S Excellence M^{r} Benjamin Franklin. . . . 1784.

29⅜x20¾. hachured. Scale 75 miles to an inch. (Boston Public Library.)

After 1784.

D'Anville. America Septentrionalis a Domino d'Anville in Gallius edita nunc in Anglia Coloniis in Interiorem Virginiam deductis etc. Norinbergae A° 1777.

Atlas Homannianus, vol. iv.

19½x18, lines colored. Scale about 100 miles to an inch. (Amer. Geog. Soc.)

1785.

Anon. Carte générale des Treize États Unis de l'Amérique Septentrionale à Amsterdam chez C. Mortier & J. Cóvens et Fils.

Scale 113 miles to an inch. (U. S. G. S.)

Bailey, Francis. A map of the United States of N. America. Philadelphia 1785.

Outlines, 6½x5. Shows state divisions and poor map of the Chesapeake. Republished in McCulloh, Introduction to the History of Amer., 1787.

1786.

Anon. Nouvelle Carte de l'Amérique avec tous ses Royaumes, États, Iles, (etc) published by Pierre Vander, Aa, Marchand, Libraire à Leide. (U. S. G. S.)

Sayer, Robt. A new map of the whole continent of America, divided into North and South and West Indies, wherein are exactly described The United States of North America as well as the several European Possessions according to the Preliminaries of Peace signed at Versailles, Jan. 20, 1783. Compiled from Mr. D'Anville's maps of that continent with the addition of the Spanish Discoveries in 1775 to the north of California and corrected in the several Parts belonging to Great Britain from the original materials of Governor Pownall M.P. London. Printed for Robt. Sayer 1786.

40x36, outline, symbols. Scale 4⅜ inches to 1000 miles. No streams except the Patomak and no western boundary. Annapolis only town given. (U. S. G. S.)

1787.

Anon. Carte générale des états de Virginie, Maryland, Delaware, Pensilvanie, (etc) d'après la carte amériquaine de Louis Evans et la carte anglaise de Thomas Jefferys. Gravé par P. F. Tardieu.

Letters d'un cultivateur américain, par J. Hector saint John de Crèvecoeur. 8°. Paris, 1787, vol. ii, front. (Phillips.)

Anon. A map of the country between Albemarle sound and lake Erie, comprehending the whole of Virginia, Maryland, Delaware and Pensylvania, with parts of several others of the United States of America.

Notes on the state of Virginia, by Thos. Jefferson. 8°. London, for J. Stockdale, 1787. Based on Fry and Jefferson. (Phillips.)

The Peabody copy contains "The State of Virginia from the best authorities, by Samuel Lewis, 1794," from Cary's American edition of Guthrie's Geography.

Faden, Wm. The Marches of Lord Cornwallis in the Southern Provinces, now States of North America: Comprehending the Two Carolinas with Virginia and Maryland, and the Delaware counties, By William Faden. London 1787.

A History of the Campaign of 1780 and 1781 in the Southern Provinces of North America, by Banastre Tarleton. 4°. London, for T. Cadell, 1787.

Also published separately? (Phillips.)

1790.

Lotter, Matthieu Albert. Carte Nouvelle de l'Amérique Anglois, contenant de l'Amerique septentrionale savoir le Canada la Nouvelle Ecosse ou Acadie les treize Provinces Unies qui font: les quartres Colonies, (etc). Gravée exactement d'apres les determinations géographique dernierement faites par Matthieu Albert Lotter à Augsbourg.

19¼x23⅝, colored, symbols, few towns. Scale 10 leagues to an inch. Maryland ends at Hancock and includes Delaware; shore line but little indented. (U. S. G. S.)

Lotter, Tob. Cour. Pensylvania Nova Jersey et Nova York cum Regionibus ad Fluvium Delaware in America Sitis, nova Delineatione ob oculas posita per Tob. Cour. Lotter, Geographium. Aug. Vind.

22½x19½, states, colored, symbol. Scale 16 miles to an inch. Curious distribution of state lines. Maryland extends to Hancock. (Amer. Geog. Soc.)

1791.

Evans, Lewis. New Pocket Map of the following Independent States of North America. Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island.

Bowles's Universal Atlas. London, 1791 (?). fol. (Amer. Geog. Soc.?)

1792.

Folie, A. P. Plan of the Town of Baltimore and Environs. Dedicated to the Citizens of Baltimore. Taken upon the spot by their most humble Servant A. P. Folie, French Geographer. James Poapard sculpsit, Phila.

25x23, outline. Scale 40 perches to an inch.

1793.

Miñoz, J. B. Mapa del Nuevo-Mundo.

Historia del Neuvo-Mundo eseribiala D. Juan Bant Miñoz Tome I, Madrid, MDCCXCIII.

12½x14¾, outline, maps of both continents. (Peabody.)

1794.

Holland, N. A New chart of the Coast of North America from New York to Cape Hattaras including the Bays of Delaware and Chesapeak with the coasts of New Jersey, Maryland, Virginia, and

Parts of the coast of North Carolina, By Captain N. Holland. London Laurie & Whittle 1794.

North American Pilot, second part. London, Laurie & Whittle, 1807 and 1800.

41x28, outline. Scale about 15 miles to an inch.

Lewis, Samuel. The State of Virginia from the Best Authorities By Samuel Lewis 1794.

Notes on the State of Virginia, by Thos. Jefferson. 8°. London, for J. Stockdale, 1787. Boston, Lilly & Wait, 1832.

Map is from Carey's Amer. edit. of Gunthries' Geography. (Peabody.)

Pownall. A new map of North America with the West Indian Islands Divided according to the Preliminary articles of Peace, Signed at Versailles, 20 Jan. 1783. . . . Laid down according to the Latest surveys and Corrected from the Original materials of Gov. Pownall. Mem^{br} of Parlia^{mt}. London. Published by Laurie & Whittle 53 Fleet St. 12 May 1794.

A new Universal Atlas, 3rd edit., by Thomas Kitchin. London, 1799.

2 sheets each 20x45½, boundaries colored. Scale 87 miles to an inch. (Peabody.)

Russell, J. An Accurate Map of the United States of America according to the Treaty of Peace of 1783. London, H. D. Symonds 1794.

18¾x14⅜, colored states. Scale about 100 miles to an inch. (Lenox.)

Smith, Anthony. A New and Accurate Chart of the Bay of Chesapeake (etc).

North American Pilot, second part. London, 1794. Robt. Sayer and John Bennett.

38x54, colored, symbols. Scale 3½ miles to an inch. Baltimore on Bush river.

1795.

Anon. Map of the Northern & Middle States Comprehending the Western Territory & the British Dominions in North America. From the best Authorities.

14¾x11¾, outline, drainage, mountains. Scale about 100 miles to an inch. (U. S. G. S.)

Griffith, Dennis. Map of the State of Maryland, laid down from an actual survey of all the principal waters, public roads and divisions of the Counties therein; etc. by Dennis Griffith June 20 1794—. Phila. pub. June 6, 1795 by J. Vallance, Engraver.

52x30, outline, road map, mountains hachured. Scale 4¼ miles to an inch. (Md. Hist. Soc.)

——— Map of the state of Maryland and of the Federal Territory as also of the State of Delaware. Philadelphia. (J. Vallance). 3 large sheets. (Williams).

Lewis, Samuel. Maryland.
Carey's General Atlas improved and enlarged No. 16. Phila., 1795.
16½x11⅜, counties colored, hachured. Scale 12 miles to an inch. New map unlike other editions, does not include Delaware. See 1794.

Purcell, Joseph. A map of the States of Virginia, North Carolina, South Carolina and Georgia. Comprehending the Spanish Provinces of East and West Florida (etc).
14x11½, outline, drainage and boundaries. Scale 100 miles to an inch. (U. S. G. S.)

Russell, J. Map of the southern states, comprehending Maryland, Virginia, Kentucky territory s'th of the Ohio, (etc) By J. Russell.
An American Atlas, by J. Russell. fol. London, H. D. Symond, 1795, No. 7. (Phillips.)

Scott, Joseph. Maryland.
The United States Gazetteer. 16°. Phila., 1795. (Phillips.)

Vallance. (Map of Maryland with plan of Washington). Phila. 1795.
53x30. (Winsor.) Probably Griffith's map.

1797.

Sotzmann, D. F. Maryland and Delaware von D. F. Sotzmann. (Williams.)

1798.

Smith, Anthony. A new and accurate Chart of the Bay of Chesapeak including Delaware Bay (etc).
North Amer. Pilot. fol. Boston, 1798.
(See Smith, 1776.) (Phillips.)

1799.

Anon. Plan of Baltimore. (Md. Hist. Soc.)

Handucoeur, C. P. Map of the Head of Chesapeake Bay and the Susquehanna River, with a plan of the town of Havre de Grace. (Phillips.)

1800.

Holland, N. A new chart of the Coast of North America (etc).
North American Pilot, 2nd part, new edit. fol. London, R. Laurie & J. Whittle, 1800, No. 9. (Phillips.)

Klockhoff, H. A chronographical map of the Country round Philadelphia. H. Klockhoff, sculps. Amsterdam, Cóvens et Mortier et Cóvens, Jr.

12½x11⅛. Scale 12½ miles to an inch. (Lenox.)

About 1800 (?).

Delisle. America Septentrionalis (Lenox).

Evans and Jeffrys. Carte générale des États de Virginie, Maryland, Delaware, Pennsylvanie, Nouveau Jersey, New York etc. d' après la carte de L. Evans et Th. Jefferys.

(Williams.) See 1787.

Lea, Philip. A new map of New England, New York, New Iarsey, Pensilvania, Maryland and Virginia. Sold by Geo. Willdey (?), London.

21x17¾ outline. Scale 19 miles to an inch. Somewhat distorted. No mts. south of the bay. (Amer. Geog. Soc.?)

Neale, S. J. Map of the Country between Albemarle Sound—Lake Erie, including the whole of Maryland, Virginia etc. London. engraved by S. J. Neale.

Jefferson's Notes on Virginia [different editions].

Ottens, R. J. Carte des Possessions Angloises Francoises du continent de l'Amérique Septentrionale à Amsterdam chez Ret J. Ottens.

22⅛x16⅛, colored. Scale about 110 miles to an inch. Maryland as at present. (Lenox.)

Russell, J. Plan of the City of Washington in the Territory of Columbia ceded by the States of Virginia and Maryland to the United States of America and by them established as the Seat of Government after the year 1800. Russell, sculp.

Scale 100 poles to an inch. (Lenox, Amer. Geog. Soc.)

Smith, Anthony. A new and accurate chart of the bay of Chesapeake, with shoals (etc).

North American Pilot, 2nd edit. fol. London, R. Laurie & J. Whittle, 1800, No. 11-12. (Phillips.)

Trebout, C. New Map of Georgia, Carolina, Virginia, and Maryland. C. Trebout sculp. New York. (Williams.)

1801.

Warner & Hanna's Plan of the City and Environs of Baltimore, Respectfully dedicated to the Mayor, City Council & Citizens thereof by the Proprietors. Republished by Lucas Bros. 1870.

19x28½, drainage, figures. Scale 40 perch to an inch. (Peabody.) (Md. Hist. Soc.)

1803.

Anderson and Gilpin. "Two maps of the survey between the Chesapeake and Delaware."

Mentioned in Minutes of Proc. Amer. Phil. Soc., Phila., 1744-1838, Proc. Amer. Phil. Soc., xxii (2), p. 345.

1804.

Lewis, Samuel. The State of Maryland, from the best authorities.

Carey's General Atlas No. 35. Phila., 1804 (not in English edit.).

16¼x11¼, outline, symbols. Scale 11 miles to an inch. (Amer. Geog. Soc.)

1806.

Anon. Carte de la Virginie, du Maryland et de l'état de Delaware (1806).

(Phillips.)

1807.

Mentelle (E.) et Chaulaire (P. G.). Carte Générale des États Unis de l'Amérique Septentrionale renfermant aussi quelques Provinces Angloises adjacentes.

Atlas Universal par Mentelle et Chaulaire No. 133. Paris, 1807.

16¾x12⅝, outline and drainage. Scale about 120 miles to an inch. Curious boundaries of Maryland, Hancock south to Rappahannock. (See next map.) (Peabody.)

——— Carte de la Caroline Meridionale et Septentrionale et de la Virginie.

Atlas Universal de Geographie, physique et politique, anciene et modern No. 135, par Mentelle et Chaulaire. Paris, 1807.

17x12⅝, mountains hachured. Scale 47 miles to an inch.

Maryland includes S. shore of Rappahannock (Peabody) (next map preceding has western limit from Hancock S. to Rappahannock.)

Scott, Joseph. Maryland.

A geographical description of the State of Maryland and Delaware. 12mo. Phila., Kimber, Conrad & Co., 1807.

Small map showing the location of twenty-one towns. (Boston Public Lib.)

1808.

Cary, John. A new map of Part of the United States of North America containing those of New York, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, Pennsylvania, New Jersey, Delaware, Maryland and Virginia from the latest Authorities.

Cary's New Universal Atlas, London, 1808.

20⅜x18, states colored. Scale about 48 miles to an inch. Maryland bounded on west by "Yohogany River." (Amer. Geog. Soc.)

1809.

Maclure, Wm. Map of the United States of America, (etc).

Accompanying "Observations," etc., in Trans. Amer. Phil. Soc., vol. vi, Phila., 1809, p. 411. (Marcou.)

1811.

Maclure, Wm. Cartes des États-Unis de l'Amérique-Nord pour servir aux observations géologiques.

Jour. de Phys., de Chim. et d'Hist. Nat., vol. lxxii. Paris, 1811. (Marcou.)

Howell, Reading. A map of the State of Pennsylvania. Kimber & Conrad, Phila. 1811.

34½x31½, counties and hachures. Scale 10 miles to an inch. Includes Maryland north of Baltimore. (Amer. Geog. Soc.)

1813.

Griffith, Dennis. Map of the state of Maryland and of the Federal Territory as also of the state of Delaware. 2nd. Edition J. Melish. Phila. 1813.

(See 1795.) (Williams.)

1817.

Maclure, Wm. Map of the United States of America, designed to illustrate the Geological Memoir of Wm. Maclure, Esq.

Observations on the Geology of the United States. Phila., 1817.

Trans. Amer. Phil. Soc., n. s. vol. i, 1818. Phila.

15½x18¾, hand-colored in seven colors. Scale 120 miles to an inch. (Peabody.)

1818.

[Carey, M.] Maryland.

Carey's General Atlas, improved and enlarged, 3rd edit. Phila., 1818. [1st edit. 1814.]

12 miles to one inch. (Boston Public Library.)

Poppleton, I. H. Plan of Baltimore by I. H. Poppleton, under Commission of General Assembly February 1818.

50x44. (Md. Hist. Soc.)

1820.

Tanner, H. S. Virginia, Maryland and Delaware. By H. S. Tanner. Engraved and published by H. S. Tanner.

A new American Atlas. fol. Phila., 1823, No. 15. Copyrighted Dec. 20, 1820. (Phillips.)

1822.

Lucas, Fielding, Jr. Map of Baltimore.
Scale 100 perches to one and one-half inches. (Williams.)

Maclure, Wm. (Geological map) The United States.
An Elementary treatise on Mineralogy and Geology, by Parker Cleaveland, 2nd edit. Boston, 1822.
Reduced copy of Maclure's map of 1817. (J. H. U.)

1823.

Small, W. F. A map shewing the extent of the Susquehanna Country and its Practical Canal routes as designated by the Susquehanna Commissioners 1823.
Report by the Maryland Commission on a Proposed Canal from Baltimore to Conowago. Baltimore, 1823.
10⅝x12, drainage, mountains hachured. Scale about 35 miles to an inch. (J. H. U.)

Lucas, F., Jr. A topographical Map of the route of a Proposed Canal and the country between Conewago and Baltimore.
Report by the Maryland Commission on a Proposed Canal from Baltimore to Conowago. Baltimore, 1823.
15½x18½, colored, roughly hachured. Scale 4¾ miles to an inch. (J. H. U.)

——— Maryland (with plan of Baltimore). Copyrighted Nov. 1, 1819.
A General Atlas containing distinct Maps of all the known countries in the world. Baltimore, by Fielding Lucas, Jr., 1823.
19⅝x11¼, hachured. Scale 12 miles to an inch. (Peabody.)

1824.

Shriver, Jas. Map of the Country through which a Canal to connect the waters of the Chesapeake and Ohio is proposed to pass and of the National Road between Cumberland and Wheeling with adjacent country from Actual Survey by Jas. Shriver.
Shriver's account of surveys relative to the projected Chesapeake and Ohio and Lake Erie Canals. Baltimore, 1824. (J. H. U.)

Vance, D. H. Map of Virginia and Maryland. Constructed from the latest authorities, 1824. Drawn by D. H. Vance. Engraved by J. H. Young. Published by A. Finley, Phila. 1824.
A new American Atlas fol. Philadelphia. A. Finley, 1826, No. 7.

1826.

Mease, James.
See Minutes of Proc. Amer. Phil. Soc., Phila., 1743-1838.
Proc. Amer. Phil. Soc., xxii (2), 1884, p. 554.

1827.

Bernard, S., and Poussin, W. T. Map of a Reconnaissance between Baltimore and Philadelphia exhibiting the several routes of the mail-road contemplated by the resolution of Congress approved on the 4th of May 1826.

Accompanying report of Gen. Bernard on surveys of routes for a post road from Baltimore to Philadelphia. Washington, 1827.

30x9, outline, drainage, towns, roads. Scale 9 miles to an inch.

Vandermaelen, Ph. Atlas Universel der Geographie, Physique, Politique, Statistique et Mineralogique. 1/1641836 Bruxelles 1827.

4me parte Amer. sept. No. 50 et 51 represent Maryland and adjacent states. Population, towns, counties and minerals by signs from Pr. Frederick to Newmarket. This map represents Maryland extending to Cape Charles and is lacking in Garrett, Carroll and Howard counties, and includes Accomack and Northampton. Mountains in hachure.

1828.

Lucas, F., Jr. [No title.]

Second Ann. Rept. of the President and Directors to the stockholders of the B. & O. R. R. Co. Baltimore, 1828.

13⅜x7¾, outline map of railroad location. Scale about one mile to an inch. (Peabody.)

1829.

Barney, J. Map of the Country Embracing the various Routes Surveyed for the Baltimore & Ohio Railroad by order of the Board of Engineers Drawn by Lt. J. Barney, U. S. Army.

Accompanying Third Annual Report of the President and Directors of the B. & O. R. R. Baltimore, 1829; also in 4th Ann. Rept., 1830.

23½x9¾, drainage, hachured, 3⅛ miles to an inch. (Peabody.)

Barney, C. R. Profiles of Two of the Principal Routes surveyed for the Baltimore and Ohio Rail Road from Baltimore to Williamsport.

Accompanying Ann. Rept. Pres. and Direct. B. & O. R. R. Baltimore, 1829.

37½x8¾. Horizontal scale 3.1 miles to an inch; vertical, 400 feet to an inch. (Peabody.)

1832 (?).

Hinton, J. A New and Accurate Map of North America, Laid down according to the latest and most approved Observations and Discoveries.

Univ. Mag., J. Hinton, Newgate Street.

13½x10¼, colored. Small scale.

(Reduction of Moll?). Maryland extends to Lake Erie. (Lenox, U. S. G. S.)

1832.

Lucas, Fielding, Jr. Chart of the Chesapeake and Delaware Bays compiled and published by Fielding Lucas, Jr. Baltimore. 1832.

40x28½, colored outline of coast. Scale about 6 miles to an inch. (Peabody.) See 1859.

1833.

Anon. North America, Sheet VII. Pennsylvania, New Jersey, Maryland, Delaware, Columbia and Part of Virginia.

Published July 15th, 1833, in a series of maps, modern and ancient, published under the superintendence of the Society for the Diffusion of Useful Knowledge. London (etc.).

12¼x14¾, general, hachured. Scale about 28 miles to an inch. (Peabody.)

Tanner, H. S. Virginia, Maryland and Delaware. Exhibiting the route of the James river & Kanaiwha improvement. Engraved & Published by H. S. Tanner, Phila. 1833, (Phillips).

——— A new map of Maryland and Delaware with their Canals, roads and Distances.

Tanner's Universal Atlas No. 12. Phila., 1833.

13½x10½, counties colored. Scale about 19 miles to an inch. (Peabody.)

Hayden, H. H. A Sketch of the Bare Hills near Baltimore.

Amer. Jour. Sci., vol. xxiv, 1833, facing p. 360.

5x3⅝, outline, with mineral localities indicated. Scale 4 inches to the mile.

Latrobe, B. H. Map & Profile of the Projected Lateral Railroad to the City of Washington in connection with the first Nine miles of the Balt. & Ohio Rail Road shewing the entire route from Balto. to Washington.

Accompanying Seventh Annual Report Pres. and Dir. B. & O. R. R. Baltimore, 1833.

36x8¼ (two sheets), roads, drainage. Vertical 400 feet to an inch. Scale 1 mile to an inch. (Peabody.)

1834.

Anon. A Map & Profile of the Sixth Division of the Balto. & Ohio Railroad, Extending from the Point of Rocks to Harpers Ferry Bridge.

Accompanying Eighth Ann. Rept. Pres. and Dir. B. & O. R. R., appendix 5th Ann. Rept. Chief Engineer.

26¾x10½, hachured. Horizontal scale 2 miles to an inch; vertical scale of profile 100 feet to an inch. (Peabody.)

ANON. Sketch of the Bituminous Coal Region adjacent to the Atlantic Coast.

Jour. of Int. Imp. Convention, [etc]. [1834.]

13¼x11, outline. Scale 20 miles to an inch.

DUCATEL and ALEXANDER. Maryland.

Report on the Projected Survey of the State of Maryland. Annapolis, 1834.

14x8, outline, drainage. Scale 20 miles to an inch. Location of mineral deposits given.

1835.

KNIGHT, JONATHAN. Map of the Country between Cumberland and the Ohio representing the Routes reconnoitred with a view to the extension of the Baltimore & Ohio Rail Road to that River, Drawn by H. R. Hazelhurst.

Ninth Ann. Rept. Pres. and Dir. B. & O. R. R. Appendix A, Sixth Ann. Rept. Chief Engineer.

22¾x17¾ railroads, canals, boundaries colored. Scale 5 miles to an inch. (Peabody.)

1836.

ALEXANDER, J. H. Map of the proposed Canal between the Choptank and Blackwater Rivers. (With profile.)

Report on the new map of Maryland, 1835. Annapolis, 1836, p. 4.*

17x9, four foot contours. Scale 1254 ft. to an inch. (J. H. U., Peabody.)

——— Reconnaissance of Piscatawa Creek.

Report on the new map of Maryland, 1835, p. 9.

15x11⅜, hachured. Scale 1/10680. (J. H. U.)

——— Map and Profile of the Survey of Allens Fresh.

Report on the new map of Maryland, 1835, p. 16.

17½x6¾, hachured. Scale about 11 inches to a mile. (J. H. U., Peabody.)

——— Map A (Topographical map of Southeastern Maryland.)

Report on the new map of Maryland, 1835, after p. 42.

23x14½, four foot contours, 1:211200 geology printed on. Scale 3 3/16 to an inch. (J. H. U., Peabody.)

DUCATEL, J. T., and ALEXANDER, J. H. Map B. (Geol. map western shore).

Report on the new map of Maryland, 1835, after p. 34.

16x18¾, ten foot contours, 1:200000 geology printed on. Scale 3 3/16 to an inch. (J. H. U., Peabody.)

* The pagination for these maps varies widely in the different editions.

1837.

ALEXANDER, J. H. Map of the Proposed Rail Road from Fredericktown to the Pennsylvania Line. (With two profiles.)

Report on the new map of Maryland, 1836, opp. p. 92 or 104.

22½x11¼, hachured. Scale 1:95040. (J. H. U.) (Peabody.)

——— Reconnoissance for the Atlantic Rail Road and Profile.

Report on the new map of Maryland, 1836, facing p. 84 or 95.

18¾x5½, legend horizontal scale 1:126720; vertical scale 1:12672. (J. H. U., Peabody.)

——— Reconnaissance of the Choptank and Transquaking Canal.

Report on the new map of Maryland, 1836, after p. 60 or 66.

18½x7, hachured. Horizontal scale 1:13000; vertical scale 1:860. (J. H. U., Peabody.)

——— Maryland.

Accompanying Outline of the Physical Geography of Maryland (etc.), by J. T. Ducatel in Trans. Md. Acad. Sci. and Lit., vol. i, Baltimore, 1837, p. 54.

4¼x8, hachured, towns indicated by numbers. Scale 30 miles to an inch. (J. H. U., Peabody.)

ALEXANDER, J. H., and DUCATEL, J. T. Map A (Geological map along the Patuxent).

Report on the new map of Maryland, 1836, after p. 60 or 66.

23¼x11, hachured, geological remarks.

Scale 1:150000. (Peabody copy says "read Feb. 1837.")

——— Map B (Topographic map of Georges Creek.)

Report on the new map of Maryland, 1836, after p. 60 or 66.

19x6¼, hachured. Scale 1:84480 = 1¼ miles to an inch, location of coal veins. (J. H. U., Peabody.)

LUCAS, FIELDING, JR. Small map of Maryland and Virginia. (Phillips).

TRIMBLE, ISAAC. Map of the Country between Baltimore and the Potomac embracing the several Routes, surveyed for the Maryland Canal by F. Harrison under the direction of Isaac Trimble.

Report of the engineer on the subject of the Maryland Canal. Baltimore, Lucas & Deaver, 1837.

24x29, outline, drainage, roughly hachured. Scale 1/125000, or 2 miles to an inch. (J. H. U.)

1838.

ALEXANDER, J. H., and DUCATEL, J. T. Map A (Topographical map of Cecil and Kent counties).

Ann. Rept. of the Geologist of Maryland, 1837.

21x13⅜, hachured, geological remarks. Scale 1:150000, about 3⅛ miles to an inch. (Peabody.)

——— Map B (Topographical map of Montgomery county.)

Ann. Rept. of the Geologist of Maryland, 1837.

19x12, hachured, geological remarks. Scale 1:120000, or 1.9 miles to an inch. (Peabody.)

Douglas, D. B.

Report on the coal and iron formation of Frostburg (etc.). Brooklyn (?), 1838.

Loomis, E. Magnetic Chart of the United States.

Amer. Jour. Sci., vol. xxxiv, 1838, opposite p. 290. Gives lines of equal declination and dip.

1840.

Alexander, J. H. (Topographic map of Maryland) manuscript.

79x41 contoured 50 east and 100 feet west of the Monocacy. Scale 1:2000000. (Williams.)

Alexander, J. H., and Ducatel, J. T. Map A (Topographic map of Frederick County).

Accompanying Ann. Rept. of the Geologist of Maryland, 1839.

13½x10⅝, hachure, geological remarks. Scale 1:20000. (Peabody.)

——— Map B (Topographic map of Harford, Baltimore and part of Carroll counties).

Accompanying Ann. Rept. of the Geologist of Maryland, 1839.

18⅝x12⅛, hachures, geological remarks. Scale 1:200000. (Peabody.)

1841.

Alexander, J. H. Map illustrative of Allegany & Washington Counties (with geological profile).

Ann. Rept. of the Geologist of Maryland, 1840.

16½x6⅞, hachures. Scale 1:400000. (J. H. U., Peabody.)

1843.

Hall, Jas. Geological map of the Middle and Western States.

Accompanying "Geology of New York," part iv, 4to. Albany, 1843.

Also issued separately. (Marcou.)

Moxon, Chas. Sketch of the Geology of the United States.

Accompanying "On the geology of the United States" in Geologist, edited by C. Moxon. Frontispiece. London, 1843.

"A rough reproduction and reprint of Maclure." (Marcou.)

1845.

LYELL, CHAS. Geological Map of the United States, Canada, &c. Accompanying Travels in North America (etc.), vol. ii. New York and London, 1845.

19½x15¼, hachured, 20 colors. Scale about 27 miles to an inch. Map of Maryland better than Maclure, but the Cretaceous is lacking on the western shore.

1846.

——— Geognostische Karte der Vereinigten Staaten, Canada &c. Accompanying Reisen in Nord Amerika von Charles Lyell. Deutsch von Dr. Emil J. L. Wolff. Halle, 1846. (Marcou.)

1848.

TAYLOR, R. C. Map illustrative of the Statistics of the Coal Trade in Pennsylvania (etc).

Statistics of Coal. Phila., 1848.

14¾x10⅛, boundaries colored, coal areas outlined. Scale 19 miles to an inch. (Peabody.) See 1854.

1849.

SMITH, JOHN. Virginia Discovered and Described by Captain John Smith, Graven by William Hole.

The Historie of Travaile into Virginia Brittania (etc.), by William Strachey Gent., edit. by R. H. Major, published by Hakluyt Society, London, 1849.

16x12¾, outline, symbols. Scale 6¾ leagues to an inch. (Peabody.)

U. S. COAST & GEODETIC SURVEY. Mouth of Chester River. No. 383.

14x17 (class F). Scale 1/40000, or 1.58 inches to a mile.

1850.

GRAHAM, J. D. The Boundary Lines between the Provinces of Maryland and Pennsylvania; including the three lower counties of New Castle, Kent, & Sussex, forming now the State of Delaware.

Message from the Governor of Maryland transmitting the Reports of the Joint Commissioners, and of Lt. Col. Graham, U. S. Engineers, in relation to the intersection of the boundary lines of the States of Maryland, Pennsylvania, and Delaware. Washington, 1850.

7¾x10¾. Scale about 10½ miles to an inch.

LATROBE, BENJ. H. Map & Profile of the location of the Baltimore and Ohio Rail Road from Cumberland to Wheeling (etc.) (with profile). Drawn by Albert Finch 1850.

64½x46, hachured. Horizontal scale 2 miles to an inch; vertical feet 500 to an inch. Also (as) wall map. (Peabody.)

About 1850.

Map of the Cumberland Coal Region in Allegany County, Maryland showing the lands of the Cumberland Coal and Iron Co. etc. New York. Ackerman lith.

Report upon surveys for the extension of the B. & O. R. R. (Harper's Ferry to Ohio).

24½x15⅝, hachure. Scale one inch to the mile. (After Alexander?) (Peabody. Patent.)

1851.

Poppleton, I. H. Plan of Baltimore by I. H. Poppleton corrected to date (Hoen Lith.) 1851.

See 1818. (Williams.)

Sidney, J. C., and Brown, J. P. Map of City and County of Baltimore from original surveys by J. C. Sidney and J. P. Brown.

Scale 1 mile to an inch. (Williams.)

Simmons. Poppleton's Map of Baltimore City corrected to 1851.

44x57, wall map. Scale 500 feet to an inch.

1852.

Anon. Map of Baltimore City and part of Baltimore county, including the Valley of the Great Gunpowder River, from Warren Factory to tide, from surveys made in accordance with the Resolutions of Mayor and City Council of Baltimore, May 11, 1852. Lith. by Hoen.

42½x19¼, hachured. Horizontal scale 200 feet to an inch; vertical 250 feet to an inch. (Peabody.)

Lucas, Fielding, Jr. Map of Maryland, constructed from the best authorities by Fielding Lucas, Jr. 1852.

Scale nearly 6 miles to an inch. (Williams.)

1853.

Slade, James. Plan of Baltimore and Vicinity, showing proposed routes for bringing water from Jones', Gwynn's Falls, and Patapsco River, directed by Jas. Slade, 1853.

42½x27, roughly hachured. Scale 2⅝ inch to a mile. (Peabody.)

Buch, Leopold von. Geognostische Karte von Nord America.

Ueber die Jura formation auf der Erdflache Monatsber. d. k. Akad. Wiss. Berlin, 1853. (Marcou.)

HITCHCOCK, E. A geological map of the United States and Canada 1853.

Published separately.

24x16¼, fifteen colors. Scale 113 miles to an inch. See 1854 and 1856. (Peabody.)

MARCOU, JULES. Geological Map of the United States and the British Provinces of North America.

A geological map . . . with explanatory text (etc.). Boston, 1853.

1854.

HITCHCOCK, E. A geological map of the United States and Canada 1853.

Outlines of the Geology of the globe, etc. Boston, 1854.

24x16¼. fifteen colors. 113 miles to an inch. No Cretaceous and little Eocene in Maryland. Base very poor for Maryland. (Peabody, Phila. Acad.)

SIDES, WM. Plan of Curtis Creek wharf and Railroad Company's improvements 1854.

22x28 outline figures. Scale 1/30000. (Peabody.)

TAYLOR, R. C., and HALDEMAN, S. S. Map illustrative of the Statistics of the Coal Trade of Pennsylvania (etc).

Statistics of Coal, 2nd edit. Phila., 1854.

14¾x10⅛, boundaries colored. Coal area outlined. Scale 19 miles to an inch. See 1848. (Peabody.)

1855.

LOGAN, W. E. Carte géologique du Canada. Scale: lieues de 25 au degrè dont une = 4445m.

Esquisse géologique du Canada pour servir l'intelligence de la carte géologique envoyá à l'Exposition universelle de Paris en 1855, par W. E. Logan et T. Sterry Hunt in 12°, Paris. 1855.

Bull. Geol. Soc., France, 2 serie, tome xii, Paris, 1855, p. 1316. (Marcou.)

LYELL, CHAS. Geological map of the United States, Canada etc. London 1855. See Lyell 1845.

MARCOU, JULES. Carte géologique des États Unis et des provinces anglaise de l'Amérique du Nord.

Bull. Soc. Geol. France, tome xii, 1855, p. 813.

Ann. des Mines, 5 serie, tome vii, 1855, p. 320, pl. ix. (Marcou.)

——— Carte du terrain Carbonifère dans un partie de l'Amérique du Nord.

La Bibliotheque universelle de Genève, Juin, 1855.

Black etching. (Marcou.)

——— Geologische karte der Vereingten Staaten und britischen Provincen von Nord Amerika.

Petermann's Mittheilungen, 1855, No. 15.

15½x9⅝, 12 colors. Scale 1/14000000, or 18½ miles to an inch. No Cretaceous west of Chesapeake Bay. (J. H. U.)

——— Carte géologique des États-Unis et des provinces Britaniques de l'Amérique du Nord.

Voyage dans l'Amérique du Nord en 1853 et 1854, par Guillaume Lambert. Bruxelles, 1855.

See 1853. (Marcou).

U. S. Coast and Geodetic Survey. Delaware & Chesapeake Bays. No. 376.

26x34 (class F). Scale 1/400000, or 0.16 inch to a mile.

1856.

Anon. Plat of South Baltimore.

Prospectus of the South Baltimore Compauy. Baltimore, 1856.

30x25½, outline of streets, etc. Scale 12 inches to a mile. (J. H. U.)

Hitchcock, E. Geological map of the United States and Canada 1853.

Outline of the Geology of the Globe, 3rd edit., 8vo. Boston, 1856.

24x16¼, fifteen colors. 113 miles to an inch. See 1853 and '54. (Peabody.)

Rogers, H. D. Geological Map of the United States and British North America by H. D. Rogers. 1855.

Physical Atlas of Natural Phenomena. by Alexander Keith Johnston. New and enlarged edition. Folio. Plate viii, Edinburgh, 1856.

24¼x20, outline, drainage, 17 colors. Scale about 160 miles to an inch. (Peabody.)

Scott, Jos. (?) Scott's Map of the City of Baltimore, from Surveys by Martenet.

36x50, wall map. Scale 500 feet to an inch. (Williams.)

1857.

Abert, J. J., and Kearney, J. Map of the Patuxent & St. Mary's Rivers, Maryland, from surveys by Major J. J. Abert, Top'l Eng'rs, and Major J. Kearney, Top'l Eng'rs. Compiled in the Bureau of Top'l Eng'rs. By order of the Sec. of War. . . . 1857.

38x27, outline, hachure. Scale 1/63360. Series of soundings in the river. (Amer. Geog. Soc.)

JOHNSTON, A. KEITH. United States of North America (Eastern States) by A. Keith Johnston.

The Royal Atlas of Modern Geography, by Alexander Keith Johnston. Edinburgh, 1857.

17⅜x22½, outline, drainage, mountains hachured, tinted. Scale 75 miles to an inch.

OWEN, RICHARD. 1. Map of Geological Formations and of the Forces Supposed to have Acted in Bringing these Strata to Their Present Position on the Surface of the Globe.

2. Map of North America exhibiting the localities most abounding in Coal, Metals etc. also the Parallelism of Structure in the Two Continents.

Key to the Geology of the Globe. 8°, pp. 256. Boston, 1857.

These maps represent Maryland with only Tertiary and Cretaceous and noted for copper. (Peabody.)

TAYLOR, ROBERT. Map of the City and County of Baltimore, Maryland, from actual surveys by Robert Taylor. Lith. Hinckel & Son, Baltimore, 1857.

50x60, roads. drainage. Wall map 1½ inches to a mile. (Peabody.)

1858.

BOND, ISAAC. Map of Frederick County.

34x44, wall map. Scale 1 mile to an inch. (Martenet.)

MACLURE, WM. Carte de États-Unis de l'Amérique du Nord, pour servir aux observations géologiques.

Geology of North America, by Jules Marcou. 4°. Zurich. 1858.

"Copy, on somewhat smaller scale, of the Paris edition of 1811." (J. H. U.)

MARCOU, JULES. Carte géologique États-Unis et des provinces anglaises de l'Amérique du Nord.

Geology of North America (etc.), 4°, Zurich, 1858.

Reduced copies published in Geologie und Physikalische Karten. Artaria & Co., Vienna, 1872.

La Vic souterraine, ou les mines et les mineurs, par Louis Sernonian. 4°, Carte x, p. 112. Paris, 1867. (J. H. U.)

MARTENET, SIMON. Map of Cecil County.

41x41, outline, road, wall map. Scale 1½ inches to a mile.

1859.

LUCAS, FIELDING, JR. A Chart of the Chesapeake and Delaware Bays compiled and published by Fielding Lucas, Jr. Baltimore. Corrected 1859. (Copyrighted 1832).

40x28½, outline of coast. Scale about 6 miles to an inch. (Amer. Geog. Soc.)

Morris, Wm. E. Map of Pennsylvania, constructed from the County Surveys authorized by the State and other original documents under the supervision of Wm. E. Morris, C. E. Published by R. C. Barnes, Phila. 1859.

25x25, 6 sheets, outline. Scale 5 miles to an inch. Includes outline map of most of Maryland. (Amer. Geog. Soc.)

Shanahan, Chas. E. Talbot County, Maryland.

20½x17½, outlines. Scale about 2 miles to an inch. (Martenet.)

Tyson, P. T. Geological Illustrations Accompanying the first report of Philip T. Tyson, Agricultural Chemist of the State of Maryland 1859. (Published with report 1860.)

25½x13⅜, 24 colors, 9¾ miles to an inch. (J. H. U.) (Peabody.)

U. S. Coast and Geodetic Survey. Patuxent River (lower part). No. 386. First edition (last edition 1880).

19x22 (class F). Scale 1/60000, or 1.06 inches to a mile.

Dilworth, W. H. Talbot County.

(Martenet.)

Taggart, Thos. Washington County.

51x68, outline, road, wall map. Scale 2 inches to a mile. (Martenet.)

1860.

Camp, John de la. Southern Boundary of Maryland between Smith's Point and the Atlantic.

Southern Boundary of Maryland, by Thos. J. Lee. Baltimore (?), 1860.

30½x10¾, based on coast survey chart. Scale 1/128000. (J. H. U., Peabody.)

Faul, Aug. (Manuscript map of Druid Hill Park.)

(Williams, Peabody.)

Martenet, Simon. Map of Howard County.

53x32, outline, roads, wall map. Scale 1½ miles to an inch. (Martenet.)

——— Map of Kent County.

Surveyed by Baker, County Surveyor, published by Martenet.

35x32, outline wall map. Scale 1 mile to an inch.

——— Map of Anne Arundel County.

(Williams.)

Sandoz, Ernest. Physikalische Karte des Alleghany-Systems, nach allen vorhandenen Messungen und Untersuchungen gezeichnet von Ernest Sandoz.

Petermann's Mittheilungen, 1860, No. 12.

16x9⅝, hachured. Scale 1:6000000. (J. H. U.)

Tyson, P. T. Preliminary geological map of Maryland.
First report of Philip T. Tyson, State Agri. Chemist [etc.]. Annapolis, 1860 (see 1859).

U. S. Coast and Geodetic Survey. Patuxent River—Pt. Judith to Nottingham. No. 387. First edition (last edition, 1881).
19x22 (class F). Scale 1/30000, or 2.11 inches to a mile.

1861.

Anon. Map showing the war operations in Virginia and Maryland. J. H. Bufford, Boston, (1861).
25x36. colored. (Phillips.)

Anon. Eastern Virginia and part of Maryland. New York. Schönberg & Co.
20x25, colored. (Phillips.)

Anon. A New County Map of Pennsylvania and adjoining states showing the route of the railroads [etc]. Barnes. Phila. 1861.
37x26. roughly hachured. Scale 10 miles to an inch. Maryland as far south as Washington and Annapolis. (Amer. Geog. Soc.)

Baschke, A. Topographical Map of the District of Columbia Surveyed in the years 1856, 57, 58 & 59. D. McClelland, Blanchard & Mohun. Washington, 1861.
41x41, symbols, contour (10 ft.). Scale 4 miles to an inch. Steel or copper plate. (Amer. Geog. Soc.)

Blunt, E. & G. W. Corrected map of Washington and the seat of War on the Potomac.
19¼x13½, colored, roughly drawn. Scale about 3½ miles to an inch. (Amer. Geog. Soc.)

Heyne, Chas. Map of Part of Virginia, Maryland and Delaware, from the best Authorities compiled by Chas. Heyne, New York. E. & G. W. Blunt.
26¼x37¾, outline. (Amer. Geog. Soc.)

Lloyd, J. T. Official Map of the State of Virginia From Actual Surveys by order of the Executive. 1828 & 1859. Corrected and revised by J. T. Lloyd to 1861. New York, J. T. Lloyd. Published in 4 forms.
2 sheets, total 30x46, counties colored, hachured. Scale 10 miles to an inch. Eastern Shore shows all of Maryland. (Amer. Geog. Soc.)

Schedler, J. The Seat of War (or) Birds Eye View of Virginia, Maryland, Delaware & District of Columbia. Published by W. Schaus, New York 1861 (?).
30x22¾. hachured. colored. Scale 13 miles to an inch. (Peabody—Patent.)

1862.

Anon. "Surveys for military defences." Map of northeastern Virginia and vicinity of Washington. Compiled.
U. S. War Dept., Corps of Engineers, 1862.
49x66, fold. 8°. (Phillips.)

Anon. "Surveys for military defences." Map of N. Eastern Virginia and Vicinity of Washington compiled (etc).
25x26 (4), hachure, symbols. Scale 1 mile to an inch. (J. H. U.)

Anon. War telegram marking map of Eastern Virginia, Part of Maryland and Pennsylvania. L. Prang & Co. Boston, 1862. (Peabody.)

Anon. Colton's new topographical map of the states of Virginia, Maryland and Delaware (etc). Compiled from the latest and most authentic sources on a scale of 12 miles to the inch. New York, J. H. Colton. 1862.
31x44, colored, fold. Scale 12 miles to an inch. (Phillips.)

Bache, A. Map of Eastern Virginia. Compiled from the best authorities and printed at the Coast Survey Office.
18½x22, hachured. Scale 7 miles to an inch. Railroads in red. Philadelphia to North Carolina. (Amer. Geog. Soc.)

Martenet, Simon. Map of Carroll County.
44x52, outline, road, wall map. Scale 1 mile to 1½ inches.

U. S. Coast and Geodetic Survey. Lower Cedar Point to Indian Head. No. 390. First edition (last edition 1882).
23x29 (class F). Scale 1/60000, or 1.06 inches to a mile.

1863.

Bruff, J. G. New Map of the seat of war in Virginia and Maryland. Drawn by J. G. Bruff. New York. J. Distumell 1863.
26x28, colored, fold. 8°. (Phillips.)

Smith, J. Calvin. Map of the Southern States, Maryland, Delaware, Virginia, Kentucky, Tennessee, Missouri, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Arkansas, Louisiana and Texas. New York 1863.
55x37. Scale 25 miles to an inch. (Peabody.)

U. S. Coast and Geodetic Survey. Chesapeake Bay, Pokomoke Sound to Potomac River. No. 133. First edition. (last edition 1877).
25x38 (class F). Scale 1/80000, or 0.79 inches to a mile.

——— Chesapeake Bay. Potomac River to Choptank River. No. 134. First edition. (last edition 1896).
29x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

——— Chesapeake Bay. Choptank River to Magothy River. No. 135. First edition. (last edition 1895).
29x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

——— Chesapeake Bay. Magothy River to Head of Bay. No. 136. First edition. (last edition 1877).
29x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

Weyss, John E. Military Map showing the topographical features of the country adjacent to Harper's Ferry, Va. etc. Surveyed from August 3rd to Sept. 30th 1863 under the direction of Capt. N. Michler, Corps of Eng. U. S. Army, by Major John E. Weyss, Principal Assistant, Engineer Department, Army of the Potomac.
29x24½, contours and hachures. Scale 4 inches to one mile, 20 foot contour. (Peabody.)

1864.

Bache, A. Map of the State of Virginia Compiled from the best authorities and printed at the Coast Survey office.
22x34¾, colored, hachured. Same as 1862 and 1865. (Amer. Geog. Soc.)

Green, W., Jr. Map showing the relation of the anthracite coal region to the great Appalachian coal-field according to Leslie.
Trans. North of England, Inst. Mining Eng., vol. xiii, p. 25. Newcastle-upon-Tyne, 1864. (Marcou.)

Johnson. Johnson's Virginia, Delaware, Maryland and West Virginia. New York. Johnson & Ward 1864.
17x23. (Phillips.)

Logan (Wm. E.). Geological map of Canada and the Adjacent region, including parts of the British provinces and of the United States.
Accompanying Geol. Survey of Canada (etc.). Montreal, 1865.
19⅜x8½, 30 colors. Scale 125 miles to an inch. (J. H. U.)

Martenet, S. Map of Allegany and Garrett Counties.
MS. never published. Scale 1 mile to 1¼ inches. (Williams.)

1865.

Andriveau, Goujon E. Carte Générale des Etats-Unis et du Mexique comprenant l'Amérique centrale et les Antilles. Paris 1865.
Atlas Classique et Universel de Geographie.
18⅛x24⅛. (Peabody.)

Bache, A. Map of the State of Virginia Compiled from the best authorities and printed at the Coast Survey office.

22x34¾, colored, hachures. Reprint. (Amer. Geog. Soc.)

Martenet, Simon J. Martenet's Map of Maryland, including the District of Columbia, a sketch of Delaware and a portion of Northern and Eastern Virginia (etc).

4 sheets, 36½x21¾, colored. Hachured roughly. Scale 1/221760, or 3½ miles to an inch. (J. H. U.)

——— Map of Maryland.

Atlas and wall editions. Scale 15 miles to an inch or 1/950400. (Peabody.)

——— Map of Montgomery County.

35x30 wall map. Scale 1 mile to an inch. (Martenet.)

1866.

Daddow, S. H., and Bannon, Benj. Map of Cumberland coal field.

Coal, Iron and Oil; or the Practical American Miner. Pottsville, Pa., 1866.

7x4¾, outline, roughly hachured. Scale 4 miles to an inch. (Peabody.)

Smith, John. Virginia.

A True Relation of Virginia by Captain John Smith with an Introduction and Notes by Charles Deane (Virginia Series 1). Boston, 1866.

16x12¾, outline of bay, figures and symbols.

Logan, Wm. Geological Map of Canada (etc.) While that of the United States is compiled under the authority of Professor Jas. Hall.

42x49 (2), 30 colors. Scale 1/1584000. (Peabody) fine map.

U. S. War Department. Central Virginia showing Lt. Gen. U. S. Grant's Campaign and Marches (etc). Engineer Bureau War Dept.

32x31, outline, drainage, hachured. Scale 1/350000. (Peabody.)

U. S. Coast and Geodetic Survey. Isle of Wight to Chincoteague Inlet. No. 128. First Edition (last edition 1890).

30x33 (class F). Scale 1/80000, 0.79 inches to a mile.

1867.

Kittlewell, S. H. Map of the Baltimore and Ohio Rail Road with its Branches and Connections, also Profiles.

50x46, wall map, hachured. Scale 6 miles to an inch. Vertical scale 2000 feet to an inch.

Michler, N. Harper's Ferry—prepared by Bvt. Brig. Gen. N. Michler. . . . By order of Brig. Gen. & Bvt. Maj. Gen. A. A. Humphreys, Chief of Engineers.

27½x22¾, hachured, fortifications. Scale 3 inches to a mile. (J. H. U.)

STAMP, H. M. F. P. Topographical map of the Great Gunpowder Aqueducts, (etc.)

Report to His Honor John Lee Chapman, Mayor of Baltimore, October, 1867.

7¼x12¼, contoured. Scale about 2 miles to an inch. (Peabody.)

U. S. COAST AND GEODETIC SURVEY. Chesapeake Bay. Magothy River to Head of Bay. No. 136. First edition (last edition, 1877).

29x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

1868.

BEERS, D. G. Broughman, Thomas & Co's map of the peninsula, embracing Delaware and the Eastern Shores of Maryland and Virginia. Compiled from the U. S. Coast Surveys and other actual Surveys. Broughman, Thomas & Co. Wilmington. 1868.

40x26, colored. (Phillips.)

U. S. COAST AND GEODETIC SURVEY. Potomac River. Entrance to Piney Pt. No. 388. First edition (last edition, 1877).

23x30 (class F). Scale 1/60000, or 1.06 inches to a mile.

U. S. COAST AND GEODETIC SURVEY. Potomac River. Piney Pt. to Lower Cedar Pt. No. 389. First edition (last edition, 1877).

23x29 (class F). Scale 1/60000, or 1.06 inches to a mile.

1869.

FOSTER, J. W. Geological sketch of the United States.

Resources of the Mississippi Valley, p. 272. Chicago, 1869.

7x32½, black sketching, 10 shadings. Roughly drawn in Maryland. (Peabody.)

1871.

CREDNER, HERMANN. Geognostische Karte des Alleghany-Systems nach den vorhandenen arbeiten sowie eignen Untersuchungen zusammengestellt von Hermann Credner. Die Physikalische Grundlage von A. Petermann und E. Sandoz.

Petermann's Mittheilungen, 1871, No. 3.

16x9⅝, hachured, eleven colors. Scale 1:6000000. Phyllites considered Huronian. Quaternary not separated from Tertiary. (J. H. U.)

1872.

HITCHCOCK and BLAKE. Geological Map of the United States. Compiled for 9th Census.

21½x23½, 9 colors. Scale 90 miles to an inch. (Peabody.)

1873.

Asher and Adams. Delaware, Maryland, Virginia, West Virginia and District of Columbia.

Asher & Adams, Atlas and Gazetteer of the United States. New York, 1873.

15¾x22⅝, roughly hachured. Scale 20 miles to an inch (roughly drawn map). (Peabody.)

Blodget, L. Climatological Map of Maryland.

New Topographic Atlas of Maryland, by Martenet, Walling and Gray. Baltimore, 1873.

Scale 10 miles to an inch. (Peabody.)

Gray, F. A. A New railroad map of the states of Maryland, Delaware and the District of Columbia compiled and drawn by Frank Arnold Gray 1873.

24x14½, counties colored. Scale 10 miles to an inch. (Peabody.)

Hitchcock, C. H., and Blake, W. P. Geological map of the United States.

Statistics of mines and mining in the States and Territories west of the Rocky Mountains (Raymond), p. 480. Washington, 1873.

33x21, nine colors. Scale about 90 miles to an inch.

Luke, J. D. Atlas of Frederick County. 4°. Phila. C. A. Titus & Co. 1873.

(Williams.)

Macfarlane, James. Map showing the coal fields of the United States.

The coal regions of America. New York, 1873.

13¾x23½, "black etching," roughly hand-colored, about 58 miles to an inch. (Peabody.)

——— A Topographical map of the Cumberland or Piedmont coal regions.

The coal regions of America. New York, 1873.

4¼x7¾, hachured. Scale 3 miles to an inch. (Peabody.)

——— Map of the Cumberland Coal Basin.

The coal regions of America. New York, 1873.

4¼x7¾, hachured. Scale 3 miles to an inch. (Peabody.)

Martenet, S. J., Walling, H. F., Gray, F. A. New Topographic Atlas of Maryland, with historical, scientific and statistical descriptions, and map of the United States, by Martenet, Walling & Gray. Baltimore, 1873.

Contains: 1. Map of Maryland and the District of Columbia, colored to illustrate the geological formations, by Philip Tyson, which see.

2. Climatological Map of Maryland, by Louis Blodget.

3. New Railroad Map of Maryland, by Frank A. Gray.

Scales: counties Allegany, 1/221760; Washington, 1/221760; Carroll and Frederick, Baltimore and Harford, Cecil and Kent, Howard and Montgomery, and District of Columbia, Anne Arundel and Prince George, Calvert, Charles, St. Mary's, Caroline, Queen Anne and Talbot, Dorchester, Wicomico, Somerset and Worcester, same scale. (Peabody.)

PETERMANN, A. Nord Amerika.

Adolf Stieler's Hand Atlas No. 77. Gotha, 1873.

10x13. colored, faintly hachured, bathymetric contours. Scale 1:25000000. (J. H. U.)

——— West-Indien in 4 Blättern. Bl. 2.

Adolf Stieler's Hand Atlas No. 80. Gotha, 1873.

16x13, outline and few towns, colored, faintly hachured. Scale 1:7500000. Nebenkarte:—Die Atlantischen Staaten zwischen Washington und Boston. Scale 1/2000000. (J. H. U.)

PETERMANN, A. Vereinigten Staaten von Amerika in 6 Blättern. Bl. 3.

Adolf Stieler's Hand Atlas No. 85.

16x13, colored, faintly hachured. Scale 1/3700000. (J. H. U.)

TYSON, P. T. Map of Maryland and the District of Columbia colored to illustrate the Geological Formations by Philip T. Tyson.

Atlas of Maryland, by Martenet, Walling and Gray, No. 15.

24x14½, 24 colors. Scale 10 miles to an inch. (Peabody.)

1874.

ABERT, J. J. Map of the Country Embraced in the Surveys made in 1838 under the direction of Col. J. J. Abert for routes for the proposed Maryland Canal. Annapolis 1838. Reprinted Washington Eng. Dept. 1874.

28x22, outline, hachured. Scale 1 mile to an inch approximately. Includes country between Patuxent and Monocacy rivers.

HITCHCOCK, C. H. Map of the Coal fields of the United States compiled from State reports.

Statistical Atlas of the United States based on the results of the Ninth Census, 1870 (etc.), plates xi and xii, folio. Washington, 1874.

HITCHCOCK (C. H.) and BLAKE (W. P.). Geological map of the United States, compiled from the sources mentioned in the text.

Statistical Atlas (etc.), plates xiii, xiv, folio. Washington, 1874, also published 1872, '76 and '79.

(Tyson for Md.)

Land Office. Map of the United States and Territories showing the extent of Public Surveys etc. General Land Office 1874.

Scale 40 miles to an inch. (Peabody.)

1875.

Hall, James. Map illustrating the Paper on the Relations of the Niagara and Lower Helderberg Formations and their Geographical Distribution. (1874).

28th Rept. N. Y. State Museum. Albany, 1875.

22x22, colored to represent Niagara, Onondago and L. Helderberg. Scale about 55 miles to an inch. (J. H. U.)

Hitchcock & Blake. Die Steinkohlen felder der Vereinigten Staaten von N. A., nach der Karte von Hitchcock und Blake. Maastab. 1: 13,500,000.

Petermann's Mitth. 4°, vol. xxi, 1875, pl. xvi.

7⅝x9⅞, coal areas colored. Scale 1/13500000. (J. H. U.)

Isler, John B. Map of Caroline County, Maryland. Phila. (?) 1875. Copyright 1873.

61x36¾, outline, drainage districts. Scale 1⅝ inches to mile. (Peabody.)

1876.

Boyd, E. F. Geological Map of the United States.

Trans. North of Eng. Inst. Mining Eng., vol. xxv, plate xliii, p. 188. Newcastle-upon-Tyne, 1876.

Rough map based on Hitchcock and Blake, 1874. (Marcou.)

——— Map of the Coal fields of the United States.

Idem., plate xliv. (Marcou.)

Bradley, F. H. Geological chart of the United States East of the Rocky Mountains and of Canada. New Haven 1875.

Black etching. (Marcou.)

Gray, Frank A. Maryland, Delaware and the District of Columbia.

The National Atlas. Phila., 1885.

64x40 cm., colored, counties, hachures, towns. Scale 10 miles to an inch. (J. H. U.)

Hitchcock, C. H., and Blake, W. P. Geological map of the United States.

Accompanying special report of the Smithsonian Institution for the Centennial. Washington, 1876.

See authors, 1874. (Marcou.)

1877.

Hitchcock, C. H., and Blake, W. P. Geological map of the United States.

Atlas of the United States and the World, by Gray, folio. Phila., 1877. See authors, 1874. (Marcou.)

Hopkins, G. M. Map of Maryland, Delaware and the District of Columbia by G. M. Hopkins.

Hopkins Atlases.

24x15¾, counties colored. Scale 1/506886, or 8 miles to an inch. (Peabody.)

Gray, F. A. New Railroad map of the states of Maryland, Delaware and the District of Columbia. Copyrighted by O. W. Gray & Son.

All of Lake, Griffing & Stevenson's county atlases.

24x14¾, counties colored. Scale 10 miles to an inch. (Peabody.)

Hopkins, G. M. Atlas of Baltimore County. 4°. Phila. 1877. (Williams.)

——— Atlas of Baltimore and its Environs. 2 vols. 4°. Phila. (?) 1876-7.

Scale 800 feet to 1 inch. (Williams.)

Lake, Griffing and Stevenson. An Illustrated Atlas of Kent and Queen Anne Counties. 4°. Phila. Lake, Griffing & Stevenson, Phila. 1877.

Contents: Outline plan of Kent and Queen Anne counties, 2½ miles to an inch.
1st District, Millington. Scale 1½ inches to a mile.
2nd District, Kennedysville. Scale 1½ inches to a mile.
3rd District, Worton. Scale 2 inches to a mile.
4th District, Chestertown. Scale 2 inches to a mile.
5th District, Edesville. Scale 1½ inches to a mile.
Dixon's Tavern District No. 1. Scale 1½ inches to a mile.
Church Hill No. 2. Scale 1½ inches to a mile.
Centreville No. 3. Scale 1½ inches to a mile.
Kent Island No. 4. Scale 1½ inches to a mile.
Queenstown No. 5. Scale 1½ inches to a mile.
Ruthsburg No. 6. Scale 1½ inches to a mile. (Peabody.)

——— Atlas of Cecil County. 4°. Lake, Griffing & Stevenson, Phila. 1877.

Contains outline map of Cecil county, 2 miles to an inch.
Cecilton, 1st Dist. Scale 1½ inches to a mile.
Chesapeake City, 2nd Dist. Scale 2 inches to a mile.
Elkton, 3rd Dist. Scale 2 inches to a mile.
Fair Hill, 4th Dist. Scale 2 inches to a mile.
North East, 5th Dist. Scale 1½ inches to a mile.
Brick Meeting House, 9th Dist. Scale 2 inches to a mile.

Port Deposit, 7th Dist. Scale 2 inches to a mile.
Rising Sun, 6th Dist. Scale 2 inches to a mile.
Mt. Pleasant's, 8th Dist. Scale 2 inches to a mile.
Plats of towns. (Peabody.)

——— An Illustrated Atlas of Talbot and Dorchester Counties. 4°. Lake, Griffing & Stevenson, Phila. 1877.

Conteuts:
Outline plan of Talbot county. Scale 2 miles to an inch.
Easton. Scale 1½ inches to a mile.
St. Michaels. Scale 1½ inches to a mile.
Trappe. Scale 1½ inches to a mile.
Chapel. Scale 1½ inches to a mile.
Bay Hundred. Scale 1½ inches to a mile.
Fork. Scale 1⅓ inches to a mile.
East New Market. Scale 1¼ inches to a mile.
Vienna. Scale 1⅓ inches to a mile.
Parson's creek. Scale 1⅓ inches to a mile.
Lake. Scale 1¼ inches to a mile.
Hooper's Island. Scale 1½ inches to a mile.
Cambridge. Scale 200 rods to an inch.
Neck. Scale 200 rods to an inch.
Church creek. Scale 1½ inches to the mile.
Strait. Scale 1 inch to the mile.
Drawbridge. Scale 1 inch to the mile.
Williamsburg. Scale 2 inches to the mile.
Bucktown. Scale 1 inch to the mile.
Besides plans of towns and map of state. (Peabody.)

——— Atlas of Washington County. 4°. Phila. Lake. Griffing & Stevenson. 1877.

(Williams.)

——— Atlas of Carroll County. 4°. Phila. Lake. Griffing & Stevenson 1877.

(Williams.)

Martenet, Simon J. Outline Plan of Wicomico, Somerset and Worcester Counties, Md.

12½x14½. Scale 3 miles to an inch.
Wicomico, 12½x14½. Scale ½ inch to a mile.
1. Barren creek. Scale 1½ inches to a mile.
2. Quantico. Scale 1⅓ inches to a mile.
3. Tyaskin. Scale 1⅓ inches to a mile.
4. Pittsburg. Scale 1½ inches to a mile.
5. Parsons. Scale 1½ inches to a mile.
6. Dennis. Scale 1⅝ inches to a mile.
7. Trappe. Scale 200 rods to an inch.
8. Nutters. Scale 1½ inches to a mile.
9. Salisbury. Scale 1½ inches to a mile.
Somerset, 23x14½. Scale ½ inch to a mile.
1. Princess Anne. Scale 1⅓ inches to a mile.
2. Dame's Quarter. Scale 2 inches to a mile.
3. Brinkley's. Scale 1⅓ inches to a mile.
4. Dublin. Scale 1⅓ inches to a mile.

5. Hungary Neck. Scale 2 inches to a mile.
6. Fairmount. Scale 200 rods to an inch.
7. Trappe. Scale 200 rods to an inch.
8. Lawsons. Scale 2 inches to a mile.
9. Tangier. Scale 3 inches to a mile.

Worcester. Scale ½ inch to a mile.

1. Newtown. Scale 1½ inches to a mile.
2. Snow Hill. Scale 1⅓ inches to a mile.
3. E. Berlin. Scale 1⅓ inches to a mile.
4. Newark. Scale 1½ inches to a mile.
5. St. Martin's. Scale 1 inch to a mile.
6. Colbourne. Scale 1½ inches to a mile.
7. Atkinson. Scale 1¼ inches to a mile.
8. Stockton. Scale 1⅓ inches to a mile.
9. West Berlin. Scale 1⅓ inches to a mile.

Plats of towns, etc. (Peabody.)

U. S. Coast and Geodetic Survey. Chesapeake Bay—Pocomoke Sd. to Potomac River. No. 133.

Last edition (first edition, 1863), 25x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

——— Chesapeake Bay. Magothy River to Head of Bay. No. 136.

Last edition (first edition, 1863), 29x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

——— Chesapeake Bay. Potomac River, Entrance to Piney Pt. No. 388.

Last edition (first edition, 1868), 23x30 (class F). Scale 1/60000, or 1.06 inches to a mile.

——— Potomac River—Piney Pt. to Lower Cedar Pt. No. 389.

Last edition (first edition, 1868), 23x29 (class F). Scale 1/60000, or 1.06 inches to a mile.

1878.

Hopkins, G. H. Atlas of fifteen miles around Washington including the county of Prince George. 4°. Phila. 1878.

Contains outline map of Montgomery county. Scale 2¼ miles to an inch.
Outline map of Prince George (Md.). Scale 2¼ miles to an inch.
Fairfax and Alexandria (Va.). Scale 2¼ miles to an inch.
Rockville Dist. 4th Montgomery. Scale 2 inches to a mile.
Berry Dist. 5th. Scale 2 inches to a mile.
Mechanicsville Dist. 8th. Scale 2 inches to a mile.
Cracklin Dist. 1st. Scale 2 inches to a mile.
Clarksburg Dist. 2nd. Scale 1¼ inches to a mile.
Bethesda Dist. 7th. Scale 2 inches to a mile.
Medley Dist. 3rd. Scale 1¼ inches to a mile.
Damestown Dist. 6th. Scale 1½ inches to a mile.
Vansville Dist. 1st Prince George. Scale 2 inches to a mile.
Bladensburg Dist. 2nd. Scale 2 inches to a mile.

Nottingham Dist. 4th. Scale 1½ inches to a mile.
Piscataway Dist. 5th. Scale 2 inches to a mile.
Upper Marlboro' Dist. 3rd. Scale 1½ inches to a mile.
Spalding Dist. 6th. Scale 2 inches to a mile.
Aquasco Dist. 8th. Scale 1½ inches to a mile.
Laurel Dist. 10th. Scale 2 inches to a mile.
Surrats Dist. 9th. Scale 2 inches to a mile.
Brandywine Dist. 11th. Scale 1½ inches to a mile.
Queen Anne Dist. 7th. Scale 2 inches to a mile.
Oxen Hill Dist. 12th. Scale 2 inches to a mile.
Kent Dist. 13th. Scale 1½ inches to a mile.
Fourteenth Dist. Scale 2 inches to a mile.
District of Columbia, 4 sheets, 4 inches to a mile.
Town plats and Virginia counties, etc. (Peabody.)

HOPKINS, G. M. Atlas of fifteen miles around Baltimore including Anne Arundel County. 4°. Phila. 1878.

Contains outline map of Anne Arundel county and 15 miles around Baltimore. Scale 2¼ miles to an inch.

1st Dist. Anne Arundel county. Scale 1½ inches to a mile.
2nd Dist. Anne Arnndel connty. Scale 1½ inches to a mile.
3rd Dist. Anne Arundel county. Scale 1⅓ inches to a mile.
4th Dist. Anne Arundel connty. Scale 1½ inches to a mile.
5th Dist. Anne Arnndel county. Scale 2 inches to a mile.
8th Dist. Anne Arundel county. Scale 1½ inches to a mile.
1st and 13th Dists. Baltimore county. Scale 2 inches to a mile.
2nd Dist. Baltimore county. Scale 2 inches to a mile.
3rd Dist. Baltimore county. Scale 2 inches to a mile.
4th Dist. Baltimore county. Scale 2 inches to a mile.
9th Dist. Baltimore county. Scale 2 inches to a mile.
8th and 10th Dists. Baltimore county. Scale 2 inches to a mile.
11th Dist. Baltimore county. Scale 2 inches to a mile.
12th Dist. Baltimore county. Scale 1¾ inches to a mile.
1st Dist. Howard county. Scale 3 inches to a mile.
2nd Dist. Howard county. Scale 2 inches to a mile.
Plats of towns, etc. (Peabody.)

HOPKINS, G. M. Atlas of fifteen miles around Baltimore including Howard County. 4°. Phila. 1878.

Contains outline map of county and fifteen miles around Baltimore. Scale 2¼ miles to an inch.

2nd Dist. Scale 2 inches to the mile.
1st Dist. Scale 3 inches to the mile.
3rd Dist. (Cross Dist.). Scale 1½ inches to the mile.
4th Dist. (Lisbon). Scale 1½ inches to the mile.
5th Dist. Clarksville. Scale 1⅞ inches to the mile.
6th Dist. Guilford. Scale 2¼ inches to the mile.
2nd Dist. Baltimore county. Scale 2 inches to the mile.
3rd Dist. Baltimore county. Scale 2 inches to the mile.
9th Dist. Baltimore county. Scale 2 inches to the mile.
8th and 10th Dist. Baltimore county. Scale 2 inches to the mile.
11th Dist. Baltimore county. Scale 1¾ inches to the mile.
12th Dist. Baltimore county. Scale 2 inches to the mile.
3rd Dist. (Anne Arundel). Scale 1⅓ inches to the mile.

4th Dist. (Anne Arundel). Scale 1½ inches to the mile.
5th Dist. (Anne Arundel). Scale 2 inches to the mile.
Map of state, etc. (Peabody.)

MARTENET, SIMON. Map of Harford County.
Scale 1 mile to 1½ inches. (Belair.)

RATZEL (FRIEDER). Geologische Karte der Vereinigten Staaten.
Die Vereinigten Staaten von Nord Amerika, vol. i, p. 28. München, 1878.
Perhaps reduced from 3rd issue of Hitchcock & Blake (?). (Marcou.)

TWINNING, WM. I. (?). Plat of award with certificates signed by Boundary Commissioners and Governors 9th Sept. 1878.
Platted on coast chart No. 33, Chesapeake Bay sheet No. 3, of U. S. Coast and Geodetic Survey. Scale 1/80000. (Peabody.)

1879.

HOPKINS, G. M. Atlas of fifteen miles around Washington including the County of Montgomery, Md. 4°. Phila. 1879.
Same as Hopkins "Prince George," but with different title.

MACFARLANE, J. Geological sketch of the United States.
An American geological railway guide, p. 216. New York, 1879.
Octavo, black etching and numbers. (J. H. U.)

1880.

ANON. Topographical Map of the District of Columbia showing the Projected Harbor Improvements (etc). corrected to 1880.
20x20, contour, symbols. Scale 3000 ft. to an inch. (J. H. U. Hist.)

U. S. COAST AND GEODETIC SURVEY. Patuxent River (lower part). No. 386. Last edition (first edition, 1859).
19x22 (class F). Scale 1/60000, or 1.06 inches to a mile.

About 1880.

Frederick County, Maryland (manuscript.)
19x20. Scale 2 miles to an inch. Drainage in blue, roads in red, railroad in black. (Looks like base of county map.) (Amer. Geog. Soc.)

(Map of Gunpowder River).
22½x11⅜, hachure. Scale 72 inches to a mile. (Peabody.)

KETTLEWELL, S. H. Plan and Profile of Proposed Diversion of Jones Falls from Belvidere Bridge to Head of Back Creek (etc).
34x16, hachured. Scale about 875 feet to an inch. (J. H. U. Hist.)

Smith, J. C. & Rae. Smith's Topographical Map of Virginia and Maryland.

13x24¾, colored, with shading to represent hachures. Roughly drawn. Scale about 25 miles to an inch. (Amer. Geol. Soc.)

——— Enlarged map of the Coast from New York Harbor to Cape Fear (2 sheets).

12½x40, outline. Scale 12½ miles to an inch. (J. H. U. Hist.)

Strong. Map of Queen Anne County. (Williams.)

Worcester. Map shewing the Several Surveys for the Western Maryland Railway.

Lith. Hoen. 16¼x32¾, hachured with profile. Scale 3 inches to a mile. (Peabody.)

1881.

Andree, Richard. Vereinigten Staaten von Nord Amerika.

Allgemeiner Hand Atlas in sechs- und achtzig Karten mit erlauternden text. Bielefeld u. Leipzig, 1881.

14¼x9½, drainage, colored, hachure. Scale 1:10000000. (J. H. U.)

——— Die Nordast Staaten der Union.

Allgemeiner Hand Atlas [etc.]. Bielefeld u. Leipzig, 1881.

14¼x9½, drainage and principal towns, hachured, colored. Scale 1:5000000. (J. H. U.)

Colton. Colton's new topographical map of the States of Virginia, West Virginia, Maryland and Delaware and portions of adjoining States. New York, C. W. & C. B. Colton & Co. 1881.

30x43, colored. (Phillips.)

Hitchcock, C. H. Geological Map of the United States. Scale 20 miles to the inch. New York, 1881.

(Rev.) Amer. Jour. Sci., 3rd ser., vol. xxi, 1881.

13 ft. x 8 ft, colors. Scale 20 miles to an inch. Wall map.

Reese, George M. Map of the uppermost part of the Peninsula showing the location of Indian forts . . . boundary line etc.

Johnston's History of Cecil county.

12x12. Scale 5 miles to an inch.

U. S. Coast and Geodetic Survey. Patuxent River—Pt. Judith to Nottingham. No. 387. Last edition (first edition, 1860).

19x22 (class F). Scale 1/30000, or 2.11 inches to a mile.

1882.

Anon. (Maryland, Delaware.)

Rand, McNally & Co.'s Indexed Atlas of the World. Chicago, 1882.

Several editions of different dates.

19x12¾, countries colored, rough hachure, 11½ miles to an inch. (Peabody.)

HITCHCOCK, C. H. Gray's Geological Map of the United States.
The National Atlas. Stedman & Brown, Phila., 1885, p. 205.
24¾x15⅝, 9 colors. Scale 1/7466470, or 118 miles to an inch.
Little or no alluvium on Western Shore. Seven formations distinguished in Maryland. (J. H. U.)

ROBINSON, E. Map of Baltimore and Vicinity. E. Robinson (?). New York, 84 Nassau St. 1882. (Williams.)

U. S. COAST AND GEODETIC SURVEY. Baltimore Harbor and Approaches with sub-charts of the Basin and Sparrows Point on scale 1/10000. No. 384. First edition (last edition, 1895).
27x39 (class F). Scale 1/40000, or 1.58 inches to a mile.

——— Potomac River. Lower Cedar Point to Indian Head. No. 390.
First edition, 1862.
23x29 (class F). Scale 1/60000, or 1.06 inches to a mile.

1884.

CHESTER, F. D. Map showing Distribution of Delaware Gravels—Northern area.
Amer. Jour. Sci., 3rd ser., vol. xxvii, 1884, p. 192.
3¾x4¾. Scale about 9 miles to an inch.
Comprises in area the larger portion of New Castle and all of Cecil county, Md.

DE LAET. Nova Anglia, Novum Belgium et Virginia (1630).
Winsor's Narrative and Critical History, vol. iii. Boston, 1884. p. 124.

FARRER, VIRGINIA. A mapp of Virginia discovered to ye Hills [etc].
Winsor's Narrative and Critical History, vol. iii. Boston, 1884. p. 464.
See 1651.

HEILPRIN, A. Heilprin on Tertiary Geology of Eastern and Southern United States.
Contributions to the Tertiary Geology and Paleontology of the United States, by Angelo Heilprin. Phila., 1884.
11x15, colored. Scale about 120 miles to an inch.

HEILPRIN, A. On Tertiary Geology of Eastern and Southern United States.
Jour. Acad. Nat. Sci., Phila., 2nd ser., vol. ix, 1884.
10x15, outline with six colors. Scale about 120 miles to an inch.

HERMANN, A. (Map of Maryland) (1635).
Winsor's Narrative and Critical History, vol. iii. Boston, 1884. p. 523.
Reduced reproduction.

HEWES, F. W., and GANNETT, HENRY. Map of the United States showing the Principal Topographical features.
Scribner's Statistical Atlas of the United States, by Fletcher W. Hewes and Henry Gannett.
25½x17⅜, hachured, colored. Scale 44 miles to an inch. Drainage, topography, prominent towns. (J. H. U.)

HOTCHKISS, J. Geological Map of Virginia and West Virginia. The Geology by Prof. W. B. Rogers chiefly from the Virginia State Survey "with later observations in some parts."
Geology of the Virginias. Appleton, 1884.
17x10, eleven colors. Scale 1/1520, or 24 English statute miles to an inch.

SMITH, JOHN. Virginia.
Winsor's Narrative and Critical History, vol. iii. Boston, 1884. p. 167.
Reproduced reproduction.

——— [Virginia.]
The General Historie etc. Third Book 1624. A reprint, with variations of the Second Part of The Map of Virginia 1812.
Eng. Scholars' Library No. 16. Birmingham, 1884.
15¾x12¼. Scale 5¾ leagues to the inch.

THOMAS, GABRIEL. Pennsylvania and West Jersey.
Winsor's Narrative and Critical History, vol. iii. Boston, 1884. p. 501.
Reduced reproduction.

WEBSTER, ALBERT L. Baltimore and its Neighborhood. An Excursion Map compiled for the Johns Hopkins University, etc. Edited by Albert L. Webster. Drawn by Louis Neil. Baltimore, Johns Hopkins University, 1884.

1885.

BROMLEY, G. W. & W. S. Atlas of Baltimore, Md. (incomplete) 2 vols. 1885.
(See 1896.) (Peabody.)

LAING, JOHN. Topographical Map of Portions of Maryland and Pennsylvania showing the crossing of the Blue Ridge Mountains by the Western Maryland Railroad [etc]. 1895.
22x16½, hachured. Scale 2⅔ inches to a mile. (J. H. U.)

MARTENET, S. J. Map of Maryland, Atlas edition.
Scale 15 miles to an inch, or 1/950400. (Martenet.)

——— Martenet's map of Maryland and District of Columbia, 1885.

72x46. Districts tinted, ridges hachured. Scale 3½ miles to an inch, or 1/221760. (Peabody.)

1886.

Benton, Edward R. Map of Eastern Maryland, showing location of iron orebands sampled.

10th Census, vol. xv, Mineral Industries of the United States. Washington, 1886.

6x6, outline. Scale approx. 10 miles to an inch.

Pumpelly, Raphael. Geological Distribution of the Iron Ores of the United States.

10th Census, vol. xv, Mineral Industries. Washington, 1886.

11x18, colored. Scale 83½ miles to an inch.

Williams, G. H. Geological map of the Baltimore Gabbro-area, colored upon a portion of the Johns Hopkins University Excursion map.

Bull. U. S. Geol. Survey No. 28. Washington, 1886.

11½x13 5/16, five colors. Scale 1/62500. Actual outcrops and generalized distribution represented. (J. H. U.)

1887.

Hitchcock, C. H. Geological map of the United States.

Trans. Amer. Inst. Min. Eng., vol. i, pp. 465.

Webster, Albert L. Baltimore and its neighborhood. An Excursion Map compiled for the Johns Hopkins University, etc. Edited by Albert L. Webster. Drawn by Louis Neil. Second edition. Johns Hopkins University. 1887.

25x25, outline. Scale 1 mile to an inch.

Winsor, Justin (?). Map of Maryland (showing original charter Boundary and the present Boundary).

Winsor's Narrative and Critical History of America, vol. v. Boston, 1887. p. 272.

5x7½. Scale 33 miles to inch.

1888.

Anon. Sketch showing Progress of Triangulation in the Appalachian Region to June 30, 1886.

Seventh Ann. Rept. U. S. Geol. Survey, 1888, pocket.

23½x19, black, outline. Scale 30 miles to an inch. (J. H. U.)

ANON. [Maryland, Delaware].

Rand, McNally & Co.'s Improved Indexed Business Atlas and Shippers' Guide No. 173. Chicago, 1888. 17th edition.

19x12¾, same base as 1882, but uncolored. (Peabody.)

This map has been published several times in different editions.

MCGEE, W J Drainage map of the Middle Atlantic Slope.

Seventh Ann. Rept. U. S. Geol. Surv., 1888, facing p. 548.

6⅝x9½, outline and drainage. Scale 1/2230000, or 35 miles to an inch. Shows fall line and divide. (J. H. U.)

——— Map of the Head of Chesapeake Bay. Showing the Distribution [and coarseness] of the Columbia Formation.

Seventh Ann. Rept. U. S. Geol. Surv., 1888, facing p. 552.

6⅝x7⅝, colored. Scale 1:320000, or 5 miles to an inch. (J. H. U.)

——— Stereogram of the Middle Atlantic Slope.

Seventh Ann. Rept. U. S. Geol. Surv., 1888, after p. 586.

9½x9½, colored, shaded, sections. Horizontal scale 1:2230000, or 35 miles to an inch; vertical scale 1:425000, or 35000 ft. to an inch. Shows form of the continental platform. (J. H. U.)

RIPPEY, Jos. Index Map of Baltimore. New York 1888.

Scale 500 feet to an inch. (Williams.)

UHLER, P. R. [The Distribution of the Albirupean Formation in Maryland.]

Proc. Amer. Phil. Soc., vol. xxv, 1888, p. 51.

4x4, outline, geological shading. Scale about 20 miles to an inch.

1889.

U. S. COAST AND GEODETIC SURVEY. Annapolis Harbor. No. 385.

Last edition (first edition, 1859).

30x32 (class L). Scale 1/10000, or 6.34 inches to a mile.

1890.

BARTHOLOMEW, J. New York, New Jersey, Pennsylvania, Maryland and Delaware with environs of New York and Philadelphia.

The Library Reference Atlas of the World, by John Bartholomew. London, Macmillan, 1890.

11⅝x16, outline, drainage, hachured, states colored. Scale 33 miles to an inch. (Peabody.)

CHESTER, F. D. Map of Gabbro Area in Delaware, by F. D. Chester.

Bull. U. S. Geol. Survey, No. 59, Washington, 1890, p. 7.

Includes northeast corner of Maryland as far east as Elkton.

FLAHERTY, W. T. Map of Canton with Adjoining Portion of Baltimore city. Drawn by W. T. Flaherty.

34¾x23¼, ontline. Scale 1000 ft. to an inch.

SMITH, JOHN. Virginia. Discovered and Described by Captayn John Smith, graven by William Hole.

Facsimile [reduced] in "Genesis of the United States," by Alexander Brown, vol. ii, p. 596. Bostou, 1890.

5¾x7¾.

TYNDALL, ROBT. or POWNALL, CAPTAIN.

The Genesis of the United States, by Alexander Brown, vol. i, p. 456. Boston, Houghton, Mifflin & Co., 1890.

28¾x20¾. Scale 100 leagues to 5¾ inches. (Peabody.)

U. S. COAST AND GEODETIC SURVEY. Isle of Wight to Chincoteague Inlet. No. 128.

First edition, 1866. 30x33 (class F). Scale 1/80000, or 0.79 inches to a mile.

U. S. GEOLOGICAL SURVEY. Topographical Sheets. Baltimore.

First edition (last edition, 1896) 13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets, Mt. Vernon.

First edition (last edition 1897), 13⅝x17½, 50 feet contonr. Scale 1/125000.

1891.

BRADLEY, [F. H.] Delaware, Maryland, Virginia and West Virginia.

Bradley's Atlas of the World. Phila., 1891. No. 61.

23¾x15. Counties colored, drainage, towns and railroads. Scale 20 miles to an inch. (J. H. U.)

CLARK, W. B. Distribution of the Eocene in the United States.

Bull. U. S. Geol. Survey No. 83, 1891, p. 147.

12¼x8, outline, one color. Scale 250 miles to an inch. (J. H. U.)

DALL, W. H. Map of the Known Distribution of the Neocene Formations in the United States.

Bull. U. S. Geol. Survey No. 84. Washington, 1892. p. 178.

14¾x8¼, eight colors. Scale about 515 miles to an inch. (J. H. U.)

DARTON, N. H. Preliminary Geologic Map of Eastern Virginia and Maryland.

Bull. Geol. Soc. Amer., vol. ii, 1891, p. 431.

4¾x7½, seven patterns. Scale 25 miles to an inch. (J. H. U.)

GEIGER, H. R., and KEITH, ARTHUR. Geologic Map of Harper's Ferry Region.

Bull. Geol. Soc. Amer., vol. ii, 1891, pl. 4.

4½x5¾, outline, geological shading. Scale 6 miles to an inch.

LINDENKOHL, A. Middle Atlantic Coast Region.
Amer. Jour. Sci., 3rd ser., vol. xli, 1891, p. 492.
7⅞x8, contours at 150,300 and 400 ft. Scale 1/2000000, also 20, 100, 500, 1000, and 1500 fathoms lines.

MCGEE, W J Physiography of the Coastal Plain of Southeastern United States by W J McGee.
Twelfth Ann. Rept. U. S. Geol. Survey, vol. i. Washington, 1891. Pocket.
21x16½, land and marine contours. Scale 1/5000000. On this same basis are also:—

——— Areal Distribution of the Columbia and Lafayette Formations of Southeastern United States.
2 colors.

——— Physiography of the Coastal Plain of Southeastern United States during the Lafayette Period.

——— Physiography of the Coastal Plain of Southeastern United States during the Post-Lafayette and Pre-Columbia Period.

——— Physiography of the Coastal Plain of Southeastern United States during the Columbia Period.

U. S. GEOLOGICAL SURVEY. Topographical Sheets. Relay.
First edition (last edition, 1896).
13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. West Washington.
13⅝x17½, 20 ft. contour. Scale 1/62500, or one mile to an inch.

WALCOTT, C. D. Distribution by Geological Provinces of the Cambrian Strata as shown by Surface Outcrops in North America by C. D. Walcott.
Bull. U. S. Geol. Survey No. 81. Washington, 1891, p. 358.
12x8, outline, one color. Scale about 315 miles to an inch. (J. H. U.)

WHITE, C. A. Map showing the Distributions of Cretaceous Formations of North America.
Bull. U. S. Geol. Surv. No. 82. Washington, 1891, p. 268.
8x10, two colors. Scale about 515 miles to an inch. (J. H. U.)

WHITE, I. C. Map Showing the general distribution of the Upper and Middle Carboniferous Formations in the Bituminous Coal Regions of Pennsylvania, West Virginia, and Ohio by I. C. White 1888.
Bull. U. S. Geol. Survey No. 65. Washington, 1891, p. 1.
22½x23, outline, six colors. Scale 16 miles to an inch, or 1/1584000. (J. H. U.)

WILLIAMS, G. H. Piedmont Plateau in Maryland.
Bull. Geol. Soc. Amer., vol. ii, 1891, p. 301.
4¾x7½, outline with four patterns. Scale about 14 miles to an inch. (J. H. U.)

1892.

Anon. Uebersicht von Nord Amerika nach den geologischen Vermessungen von Canada, der Vereinigten Staaten und anderen Quellen.
Berghau's Physikalischer Atlas, 3rd edit. Gotha, 1892.
16x13, six colors, scale 1:30000000. (J. H. U., Peabody.)

Darton, N. H. Baltimore sheet (U. S. G. S. preliminary edition).
Guide to Baltimore.
See Williams.

Maryland State Weather Service. Map of Maryland and Delaware showing the Precipitation and lines of mean temperature for —.
Monthly Report, 1892-?, vol. ii and vol. iii.
Maps given for May-December.

Russell, I. C. New York, Virginia and other Newark areas.
Bull. U. S. Geol. Survey No. 85. Washington, 1892. p. 21.
7¾x9½, four colors. Scale 35 miles to an inch. (J. H. U.)

U. S. Coast and Geodetic Survey. Delaware and Chesapeake Bays. No. 376.
Last edition (first edition, 1855), 26x34 (class F). Scale 1/400000, or 0.16 inch to a mile.

U. S. Geological Survey. Topographical Sheets. Annapolis.
First edition (last edition, 1896), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Baltimore [Special].
13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Drum Point.
First edition (last edition, 1896), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Ellicott.
First edition (last edition, 1896), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Leonardtown.
First edition (last edition, 1895) 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Montross.
First edition (last edition, 1895), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Piney Point.
First edition (last edition, 1895), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Point Lookout.
First edition (last edition, 1894), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Prince Frederick.
First edition (last edition, 1895), 13⅜x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Wicomico.

First edition (last edition, 1895), 13⅝x17½, 20 feet contour. Scale 1/62500.

Van Hise, C. R. Geological Map of the Northeastern States, showing pre-Cambrian and Crystalline rocks. After McGee and Hitchcock.

Bull. U. S. Geol. Survey No. 86. Washington, 1892. p. 349.

5¾x5¼, three colors. Scale 1/7600000. (J. H. U.)

Williams, Geo. H. (Editor). Geological Map of Baltimore and Vicinity.

Published by the Johns Hopkins University on the topographic base of the U. S. Geological Survey.

23¼x24, contour 20 feet, 18 colors. Scale 1/62500. (J. H. U.)

——— Same, without geological formations.

——— (editor). Baltimore Sheet (U. S. G. S. preliminary edition).

Guide to Baltimore, 1892.

17 colors and patterns. Scale 1/62500. Crystalline rocks by G. H. Williams. Sedimentary rocks by N. H. Darton.

——— Baltimore.

Guide to Baltimore, Amer. Inst. Min. Eng., 1892. Lith. by Hoen.

16x13¾, plan of streets, certain places in red. Scale 2⅞ inches to a mile.

1893.

Darton, N. H. Magothy and Associated Formations in Northeastern Maryland.

Amer. Jour. Sci., 3rd ser., vol. xlv, 1893, p. 409.

3x4½. Scale 16 miles to an inch.

Harris, G. D. Map & Stratigraphy of Calvert Cliffs, Md.

Amer. Jour. Sci., 3rd ser., vol. xlv, 1893, p. 23.

5⅝x6½. Scale about 5 miles to an inch.

McGee, W J Reconnoissance Map of the Distribution of the Geologic System so far as known.

14th Ann. Rept. U. S. Geol. Survey, part i. Washington, 1894. Pocket.

13 sheets, 28¼x17½, contoured, colored. Scale about 110 miles to an inch.

Maryland State Weather Service. Map of Maryland and Delaware showing the Precipitation and lines of mean temperature for 1893.

Monthly Report, 1893-4, vol. iii and vol. iv.

Maps given for each month in the year.

MARYLAND STATE WEATHER SERVICE. Climatic Charts of Maryland, including Delaware and the District of Columbia, together with a Map showing the distribution of the Geological and Soil Formations.

TORBET, J. B. Map of Maryland, showing the present status of the new U. S. Topographical Survey. 1892.

Johns Hopkins University Circulars No. 103, vol. xii, p. 44.

7½x4⅝, outline. Scale 33⅓ miles to an inch. (J. H. U.)

U. S. GEOLOGICAL SURVEY. Topographical Sheets. Gunpowder.

First edition (last edition, 1896), 13⅝x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. North Point.

First edition (last edition, 1896), 13⅝x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Sharps Island.

First edition (last edition, 1896), 13⅝x17½, 20 feet contour. Scale 1/62500.

——— Topographical Sheets. Mt. Vernon.

(Last edition, 1896), 13⅝x17½, 20 feet contour. Scale 1/12500.

WILLIAMS, G. H. (Editor). A Preliminary Geological map of Maryland [etc].

Maryland, Its Resources, Industries, and Institutions.

30½x17⅞, drainage, 29 colors. Scale 1/5000000 or 8 miles to an inch.

WHITNEY, MILTON. Map showing the Area and Distribution of the Principal Soil Formations in Maryland.

Bull. No. 21, Md. Agri. Exper. Sta., College Park, 1893.

Monthly Rept. Md. State Weather Service, vol. iii, 1893, p. 17.

5x9. Scale 30 miles to an inch.

WILLIS, BAILEY. Map of the Structural Districts of the Appalachian Province.

13th Ann. Rept. U. S. Geol. Survey. Washington, 1893.

Drainage, five colors. Scale approximately 74 miles to an inch. (J. H. U.)

1894.

ANON. Supplement to the Baltimore American, June 26th, 1894.

11¼x25, outline, drainage. Scale 15 miles to an inch. (J. H. U.)

DARTON, N. H. Map of the Middle Atlantic region to illustrate the extent of the Pleistocene submergence.

Jour. Geol., vol. ii, 1894, p. 583.

4¾x5¾, shaded. Scale about 50 miles to an inch.

——— Map of the Middle Atlantic Slope indicating the conditions in the time of Post Columbia maximum uplift [etc].

Idem, p. 585.

Black and white. Scale about 50 miles to an inch.

——— Fredericksburg Folio.

Geologic Atlas of the United States, folio No. 13. Washington, 1894.

13⅞x17½, contours 50 ft., seven colors. Scale 1/125000. (J. H. U.)

Douglas, H. T. (Eng.). City of Baltimore Topographical Survey (in 42 sheets).

27½x27½, contour interval 5 ft. Scale 26.4 inches to a mile.

Grimsley, G. P. Geological map of the Northwestern Portion of Cecil County, Maryland.

Cincinnati Soc. Nat. Hist., vol. xvii, 1894.

5x6½, six patterns. Scale 2 miles to an inch. (J. H. U.)

Keith, A. Harpers Ferry Folio.

Geologic Atlas of the United States, folio No. 10. Washington, 1894.

13⅞x17½, contour 100 ft., 15 colors. Scale 1/125000.

——— Geologic map of the Catoctin Belt by Arthur Keith 1893.

14th Ann. Rept. U. S. Geological Survey. Washington, 1894. Part ii, p. 309.

10x13, contour 200 ft., 16 colors. Scale 1/375000. (J. H. U.)

——— Map of the Tertiary Base-level by Arthur Keith.

14th Ann. Rept. U. S. Geol. Survey, part ii. Washington, 1894. p. 377.

10x13, contour 100 ft., colored. Scale 1/375000. (J. H. U.)

Maryland State Weather Service. Map of Maryland and Delaware showing the Precipitation and lines of mean temperature for 1894.

Monthly Report, 1894-5, vol. iv and vol. v.

Maps given for each month in the year.

Weeks, T. D. Upper Potomac and Elk Garden Coal Basins.

14th Ann. Rept. U. S. Geol. Survey, part ii. Washington, 1894. p. 580.

12½x6½, contoured, with some geological lines. Scale 3¾ miles to an inch.

Williams, G. H. Map showing the known and probable occurrences of Ancient Volcanic Rocks in Eastern North America, by George Huntington Williams 1893.

Jour. Geol., vol. ii, p. 1, 1894.

6x7¾, outline, colored geologically in two colors. Scale about 200 miles to an inch. (J. H. U.)

1895.

Anon. Map of the Cumberland, Georges Creek Coal Region. 1895.

17½x25. Property and railroad lines, also line of outcrop of "Big Vein." Hachured. Scale 1 mile to an inch. (J. H. U.)

KEYES, C. R. Map of Central Maryland showing the Distribution of the Granites by ("G. H. Williams") C. R. Keyes.

15th Ann. Rept. U. S. Geol. Survey. Washington, 1895.

6x7⅝, outline, drainage, areas colored. Scale 11 miles to an inch.

MARYLAND STATE WEATHER SERVICE. Map of Maryland and Delaware showing the Precipitation and lines of mean temperature for 1895.

Monthly Report, 1895-6, vol. v and vol. vi.

Maps given for each month in the year.

U. S. COAST AND GEODETIC SURVEY. Chesapeake Bay. Choptank River to Magothy River. No. 135.

Last edition (first edition, 1863), 29x38 (class F). Scale 1/80000, or 0.79 inch to a mile.

——— Baltimore Harbor & Approaches with sub-charts of the Basin & Sparrows Point on scale 1/10000. No. 384.

Last edition (first edition, 1882), 27x39 (class F). Scale 1/40000, or 1.58 inches to a mile.

U. S. GEOLOGICAL SURVEY. Topographical Sheets. Brandywine.

13⅞x17½, 20 ft. contours. Scale 1/62500.

——— Topographical Sheets. Montross.

Last edition, 13⅞x17½, 20 ft. contours. Scale 1/62500.

——— Topographical Sheets. Nomini.

Last edition, 13⅞x17½, 20 ft. contours. Scale 1/125000.

——— Topographical Sheets. Owensville.

Last edition, 13⅞x17½, 20 ft. contours. Scale 1/62500.

——— Topographical Sheets. Piney Point.

Last edition, 13⅞x17½, 20 ft. contours. Scale 1/62500.

——— Topographical Sheets. Prince Frederick.

Last edition, 13⅞x17½, 20 ft. contours. Scale 1/62500.

——— Topographical Sheets. Washington.

29x19, contour interval 20 ft. Scale 1/62500. (J. H. U.)

1896.

BROMLEY, GEORGE W. & WALTER S. Atlas of the City of Baltimore, Maryland. 1 vol. fol. Phila. 1896.

33 sheets, 20¼x30¼. Scale 200 ft. to the inch. (Peabody.)

CLARK, W. B. Map showing Distribution of Eocene strata in Middle Atlantic Slope.

Bull. U. S. Geol. Survey No. 141, 1896, facing p. 13.

4⅝x7½, outline, drainage and geological shading. Scale 40 miles to an inch. (J. H. U.)

Darton, N. H. Map of Portions of Maryland, Virginia and District of Columbia showing distribution of the Potomac Formation in part overlain by Columbia and Lafayette formations from data furnished by N. H. Darton 1896.

Bull. U. S. Geol. Surv. No. 145, 1896, facing p. 14.

7⅝x19, four colors, geological outline, drainage. Scale 1/500000 or 8 miles to an inch. (J. H. U.)

——— Nomini Folio.

Geologic Atlas of the United States, folio No. 23. Washington, 1896.

13⅞x17½, contour 20 ft., four colors. Scale 1/125000.

——— The Coastal Plain region of Maryland and Delaware, showing relations of underground waters, by N. H. Darton.

Bull. U. S. Geol. Survey No. 138, 1896, pl. v.

8x9, colored, symbols. Scale 15 miles to an inch.

——— Map of Baltimore region, illustrating features of underground waters, by N. H. Darton.

Bull. U. S. Geol. Survey No. 138, 1896, pl. vii.

8x10, colored, symbols. Scale 1 mile to an inch.

Darton, N. H. & Taff, Jos. Piedmont Folio.

Geologic Atlas of the United States, folio No. 28. Washington, 1896.

13⅞x17½, contour 100 ft., colors. Scale 1/125000.

Maryland State Weather Service. Map of Maryland and Delaware showing the Precipitation and lines of mean temperature for 1896.

Monthly Report, 1896-7, vol. vi and vol. vii.

Maps given for each month, Jan.-April.

U. S. Coast and Geodetic Survey. Potomac River. From Indian Head to Georgetown. No. 391.

(First edition, 1862) 23x39 (class F). Scale 1/40000 or 1.58 inches to a mile.

U. S. Geological Survey. Topographical Sheets. Annapolis.

13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Baltimore.

13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Drum Point.

13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Ellicott.

13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Frederick.

13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Gunpowder.
13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Harpers Ferry.
13⅝x17½, 100 ft. contour. Scale 1/62500.

——— Topographical Sheets. Laurel.
13⅞x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Mt. Vernon.
13⅞x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. North Point.
13⅞x17½, 20 ft. contours. Scale 1/62500.

——— Topographical Sheets. Relay.
13⅝x17½, 20 ft. contour. Scale 1/62500.

——— Topographical Sheets. Sharps Island.
13⅞x17½, 20 ft. contour. Scale 1/62500.

Van Der Hoogt, C. W. (Sec). Map of Maryland, Delaware and District of Columbia prepared by the State Bureau of Immigration.
21x13¼, counties colored. Scale about 12 miles to an inch. (J. H. U.)

ADDENDA.

Baird, G. W. Experiment to Determine the Economic Vaporization of George's Creek Cumberland Coal, Under Conditions of Actual Practice on board the Dolphin in port.
Jour. Amer. Soc. Naval Eng., vol. vii, 1895, pp. 329-331.
The most careful determinations yet made are here recorded.

Hayden, H. H. Geological Sketch of Baltimore. (Baltimore Medical and Philosophical Journal, vol. I.)
Bruce's Amer. Min. Jour., vol. i, New York, 1814, pp. 243-248.
This is practically a reprint of the earlier publication written as an abstract by the author.

Mitchill, Saml. L. A Sketch of the Scenery in the region around Harper's ferry, where the ridge of Blue Mountains is penetrated by the joint waters of the Potomac and Shenandoah rivers. In a letter . . . . to the Editor; dated Harper's ferry, July 4th, 1812.
Bruce's Amer. Min. Jour., vol. i, New York, 1814, pp. 211-218.
The author discusses the geology and stratigraphy along the Potomac between Harper's Ferry and Washington and regards the slates as older than the limestones.